

Letter from Perugia

Sagra

by WILLIAM WEAVER

Founded shortly after the last war, the Sagra musicale umbra has for almost 30 years been one of the finest, but not most popular, music festivals. Often perched on maddeningly small stages, the Sagra has presented then-unfamiliar works by Mahler and Bruckner, Bach and Schumann cycles, and premieres of Janacek and Benjamin Britten. In recent years this brief festival (it is about two days) seemed to have finally acquired an importance, though its financial future remained always uncertain. And this year that uncertainty had apparently come so acute that, until a fortnight before the opening, it was grave doubt there would be a 1971 festival.

In the last minute, a programme was pieced together, the 28th edition of the Sagra opened. This year's calendar is a bit less star-studded than usual, but the inaugural concert nevertheless of considerable interest and managed almost to the sumptuous basilica of a Pietro, scene of many memorable concerts in the past. Two works were performed: Janacek's *Threni* and Schubert's *Die Jakobsecker*, neither very familiar in the concert seasons. Though one of Stravinsky's *Italian* (premiere in Venice in 1931), *Threni* was new to most of the listeners in Perugia. Unfortunately, it did not receive a grand performance. The soloists were well chosen, the chorus of the Perugia Philharmonic (a frequent Sagra visitor) was always accurate and sensitive, and the Maggio musicale orchestra was also good; but one had the impression that the reading was not much more than that. Piero Hugli conducted carefully, but most tentatively, at a steady mezzo-forte. Stravinsky's stark music seemed undramatic, drained of content. We were offered an idea of *Threni*, but not *Threni*.

The Schönberg work, on the other hand, struck real, warming sparks. It is an even greater rarity than *Threni*. After its Italian premiere at La Scala in 1932, this was only its second performance. Obviously, Bellugi feels the piece deeply, and he brought out all its contradictory richness, clarifying on the one hand its closeness to Borg (Bellugi has conducted *Wozzeck* very well) and, on the other, its post-romantic, Strauss-like lushness. The Maggio musicale orchestra responded with constant sensitivity—the violin solos were particularly fine—and the Prague chorus performed magnificently (their choir master, Josef Veselka, was strangely not named in the house programme).

There was also an admirable array of soloists, headed by Boris Carmeli, a dramatic Gabriel, and the soprano Dorothy Dorow, whose aural, unerring voice managed to be both cutting and unbelievably warm. Tenor Gerald English was also in fine form, as was the smaller parts, excellently sung.

Though this year's Sagra seems skimpier compared to past years, there are several concerts scheduled which should be rewarding among them an evening with Peter Maxwell Davies and the *"Fires of London"*, with four Davies Italian premieres as well as a Buxtehude local premiere. As usual, the Sagra, though based in Perugia, will be giving programmes all over Umbria, Assisi, Todi, Orvieto, and other smaller towns. It would be a great pity if money problems were to prove too much for this festival; it is a musical organisation that Umbria and Italy can ill afford to lose.

Wigmore Hall

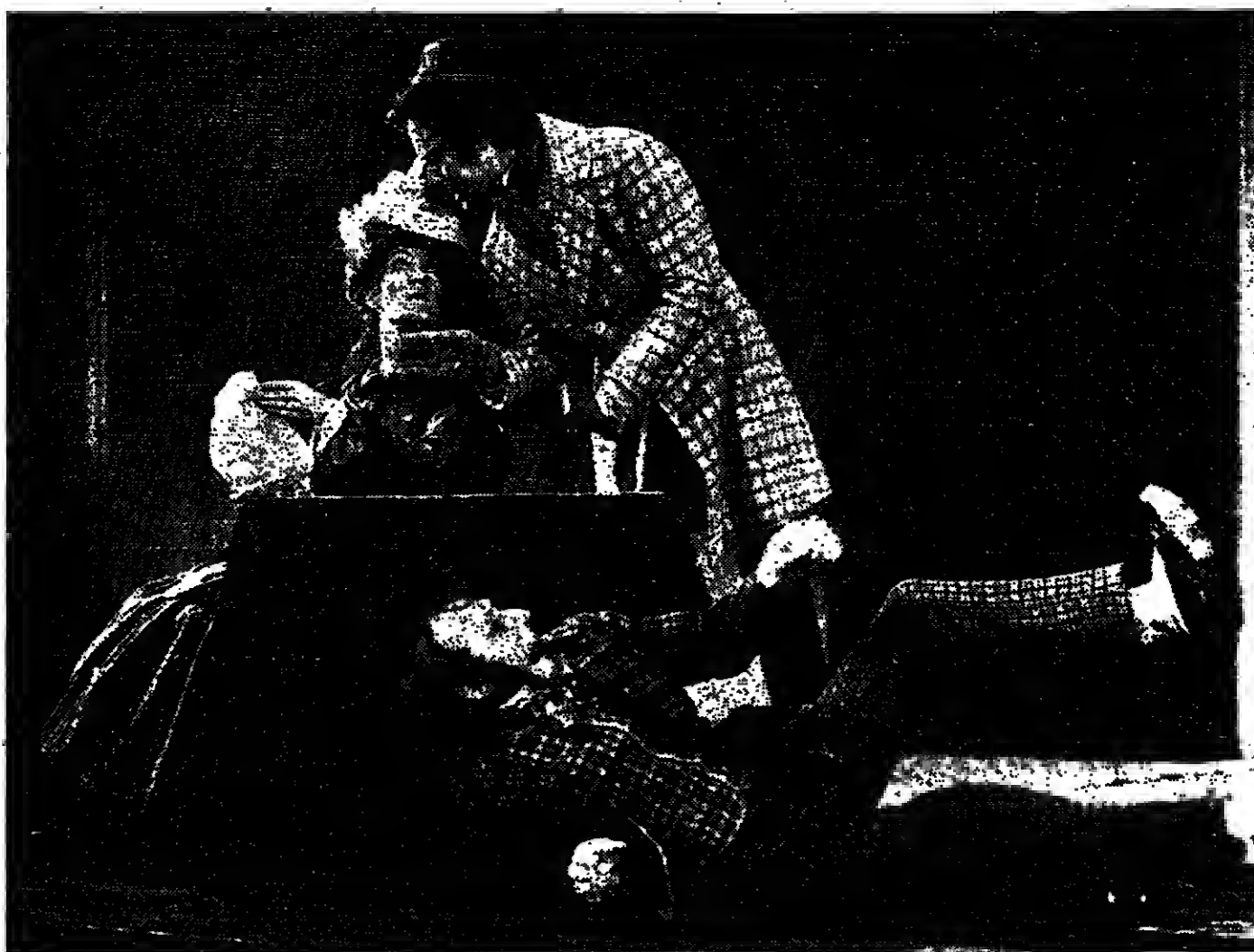
Ralph Kirshbaum

The young American cellist Kirshbaum made an excellent impression with his first London recital a year ago, and here was a nearly full house at Wigmore Hall on Saturday evening for his second. His programme could hardly have been more demanding. Back to back, he played the last of the sonatas of Brahms and Beethoven, Stravinsky's virtuoso *Suite Italienne* after Pulcinella, and a new solo work composed for Kirshbaum by Justin Connolly. A programme like this would be over-ambitious except for an artist of exceptional intelligence and sensitivity and absolutely assured technique. Mr. Kirshbaum soon convinced us of his ability to tackle it. However, works like the Brahms *F major* sonata and the Beethoven *D minor* sonata, and to some extent the Stravinsky, too, demand a partnership between cello and piano that goes far deeper than that of a soloist and accompanist; if he recital as a whole had less impact than some of his parts, it was because Brian Lamport, Mr. Kirshbaum's London-based pianist, seems to be temporarily and stylistically on a different wavelength from him. Not that his playing did not have virtues of its own—firmness, clarity, technical assurance. Mr. Lamport is not a soloist to be easily intimidated. But what one missed was a willingness to scale down to modern piano's tone to that of the cello and, more particularly, to yield to Mr. Kirshbaum's

multiple inflections of dynamics and tempo. For in spite of the brilliance of his technique, subtlety and sensitivity are undeniably the hallmarks of Mr. Kirshbaum's playing. The most impressive thing in his Beethoven and Brahms was not so much the precision of rhythm and intonation, fine as this was, but the elegant shaping of the cantabile lines. Mr. Kirshbaum never wallows in the beautiful tone of his instrument, but perpetually keeps on his toes, as it were—a quality which Connolly's *Tenzone III* exploits to the full, with rapid shifts of tone-colour and tessitura. The piece is apparently based on a 19th-century hymn tune—rather, not apparently, since the tune is so fragmented as to be unrecognisable as such, though perhaps close analysis might deduce it. The coherence of the five contrasted movements therefore depends very much on the player's concentration and commitment; it says much for Mr. Kirshbaum's musicianship that he could achieve this while coping with Connolly's imaginative exploration of every technical resource of the unaccompanied cello.

Cast change

Glennia Cortez, the Romanian mezzo soprano, took over the role of Amneris in *Aida* at the Royal Opera House last night. This is Miss Cortez's second role at Covent Garden, following her *Carmen* two years ago.



Helen Weir, Michael Pennington and John Cater in "Trelawney of the Wells" which is playing at the Arts Theatre, Cambridge.

Picasso the prisoner

by DENYS SUTTON, Editor of Apollo

Pablo Picasso celebrated his sixtieth birthday yesterday. He is still very much a hero of the contemporary scene and two exhibitions of his work are on view in London, at the ICA and the Waddington Galleries. It is sometimes hard to realise that a large part of his achievement occurred before the 1914-18 War, that watershed in European civilisation, and that he had his English admirers in that far-off time.

Inevitably the question of Picasso's contribution to art is now a matter of debate. One aspect of his work that can never be doubted is its range and ability to arouse controversy. Yet does it have qualities that appeal to a younger generation, one particularly taken by Victorians or by artists such as Gustave Moreau, that master of a complex historicism?

Picasso, the son of a painter, grew up in the fin de siècle. His many paintings, water-colours

and drawings of the Blue and Rose periods are among his most brilliant and exquisite evocations; they reveal much about his nature both as man and artist. He conjured up in them both the pleasures and pains of the belle époque. He was touched by the state of the poor and the gaudy drama of the prostitute; he was especially attracted by the world of the circus; clowns appealed to him as symbols of transience. Around the turn of the century he emerged as a poet of pathos. He was a victim of the pessimism of the age and his conception of man as a tragic figure is similar to that of his compatriot, the writer Unamuno who emphasised that life was a tragedy from birth to death. This conception coloured Picasso's attitude and explains much about his art.

Picasso in some ways has been a prisoner, seeking to escape from a tragic philosophy; this is one reason why he has found refuge in wit and in a search for the past forms, although expressed in terms of his own time. Always alert to modern trends, he was aroused by the directness of primitive forms, as may be seen in his celebrated *Les Femmes d'Alger*, 1907, a vigorous reaction to the sweetness and even sentimentality of the Blue and Rose periods. He was eager to come to grips with reality and to discover new formulae.

For Picasso, Cubism, of which together with Braque, he was an originator, offered a means of evading his problems by searching for a formal discipline. Much has been made of the way in which the Cubists created a style that is said to have done for 20th-century art what the painting of the Italian and Flemish masters did in the mid-15th century; namely, propound a new vision of space. Douglas Cooper, a leading authority on this movement, in his excellent book *The Cubist Epoch*, has argued that "Cubism involved a return to the earlier conceptual principle insofar as the artist assumed the right to fill gaps in our seeing, and to make pictures whose reality would be independent of, but no less valid than, our visual impressions of reality, and was thus stylistically the antithesis of Renaissance art."

This summing-up of the aims of Cubism is true as far as it goes. Yet after half a century or so, it may be felt that Cubist paintings, Picasso's included, do not provide a profound reinterpretation of visual reality; the experiences behind them heighten our appreciation neither of visual nor spiritual qualities; they remain decorative pictures, charming but a shade empty. Picasso at this stage was handicapped by a growing indifference to colour.

Picasso increasingly saw life as a stage. This is why he was such a marvellous designer for the Ballets Russes of Diaghilev. The theatrical element in his nature relates him to a latter-



Pablo Picasso photographed against one of his new works.

Festival Hall

NPO and LPO

by GILLIAN WIDDICOMBE

The New Philharmonia leaves for a three-week tour of the East Coast of America next week; the London Philharmonic is just home from a four-week tour of Canada, the Americas, West Coast and Mexico. London orchestras travel in style! Perhaps it is as well that they do not travel on the same trail; at least at the moment. Most of the time we avoid direct comparison between the four London orchestras, reserving it as a sophisticated weapon for special occasions. But Sunday's juxtaposition of the NPO with Maazel in the afternoon, and the LPO with Haitink in the evening, invited cut-throat competition. And though they had every reason to be tired, and to claim a handicap by having crossed the Atlantic on Saturday, it was the London Philharmonic who won. There was altogether a more enjoyable concert.

Writing about Maazel's first major bout as Associate Principal Conductor of the NPO during the last week, Ronald Crichton remarked that the relationship between conductor and orchestra must alter, and that in this case the present transi-

tion is none too happy. Seems to me that Maazel has already wrought some changes in the NPO's string playing. At best, as home from a four-week tour of Canada, the Americas, West Coast and Mexico, it has become a burnished sound, loud and fierce, with a forthright sense of clarity that is one of Maazel's specialities. In some ways this is a great gain; with Klemperer the strings had devalued the art of the uncertain, which is to be constantly indistinct.

But at the same time, Maazel has sacrificed the sweetness that used to be one of the NPO's great string virtues; he does not make the orchestra sing. And a bigger problem is that the new style is not yet completed. It was savagely undermined by Sunday's opening work—the *Adagio* from Mahler 10. That is hard enough to play cold, with long exposed solos for all string sections; and Maazel made it more hard by using the new Mahter Society edition, which omits the scoring of all the doublings of bygone days, and even rejects the consoling solutions of Deryck Cooke.

The London Philharmonic set off to start a new brilliant start, with a bright performance of Berlioz's *Corsaire* Overture. Perversely, they had chosen a concerto soloist whose tendency is to play at a constant loudness. Christoph Eschenbach played the first Beethoven concerto with the LPO and Schmidt-Isserstedt last April; and I remember him then as playing more flexibly. But perhaps that was because Schmidt-Isserstedt's stiff accompaniment, whereas Haitink ordered a rich array of dynamic shades which rather revealed an excess of Germanic heaviness from Eschenbach.

However, the highlight of the day was the LPO's performance of Shostakovich's Symphony No. 10. This they had obviously played with Haitink on the tour, for it was thoroughly shaped even by his careful standards. One of its special features was superb wind playing, and we may as well note that since Haitink became their Principal Conductor the LPO has developed the finest woodwind section of any British orchestra. Of the Shostakovich, be is also an imp of humour. Deeply convinced of the importance of art, he has been a conscious and deliberate performer in the role of the maestro. He has been done, he of rhythmic direction. Wonder whether anyone noticed that in America: it is a habit that tends to pass unremarked in western Europe.

ENTERTAINMENT GUIDE

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Farming
and Raw
MaterialsCopper market up despite
stocks increase

BY JOHN EDWARDS

COPPER prices moved up on the London Metal Exchange yesterday, despite a rise in warehouse stocks almost equal to the previous fall. Total holdings at 127,775 tons, up by 2,190 tons, are therefore only 100 tons below the all-time record established two weeks ago.

The rise in prices, with cash wirebars up by £4.5 to £42.25 a metric ton, was attributed to some steady buying from one influential source throughout the day. The firmer tone was also helped in late dealings by a Reuters report from Lima that 16,000 Cerro de Pasco workers at copper, zinc, lead and silver mines were threatening to walk out to-day in support of wage claims and demand for better working conditions.

Threat in Chile

Cerro de Pasco says it is unable to meet the demands, which because of substantial losses suffered as a result of strikes since late 1970.

The company has told the Government its production plans have been considerably delayed by strikes earlier this year and asked that discussions on its workers' demands be postponed until late 1972 because of the difficult situation.

Trouble is also threatening in Chile where some 7,000 workers

at the Chuquibambilla mine are planning to demand a 50 per cent pay rise when their labour contracts expire in December. However, for the moment any production cutbacks in South America would not be too serious. Western world stocks, according to the U.S. Copper Institute, rose by 34,310 tons in September to a total of 409,389 tons and U.S. output is likely to continue climbing with end of the copper workers' dispute there.

Rumours that the buffer stock manager of the International Tin Agreement has proposed to export the Penang market, triggered off by a fall in the Malaysian Straits Tin price over the weekend, unsettled the London tin market initially. However prices held steady on some sustained buying of three months tin, believed to be on behalf of the buffer stock, which until now has been concentrated on buying of tin. But suggestions that the buffer stock has changed policy because of depleted resources seem difficult to believe since the Tin Council recently authorised the PTC chairman to call up further contributions to the buffer stock by producing countries, if and when required.

Under the new Agreement the buffer stock is allowed to return surplus contributions to the producing countries, instead of

keeping them locked up for the whole period, so there should be less reluctance to call up reserves, especially as the International Monetary Fund is also pledged to help out.

There was a sharp fall in LME zinc values yesterday, despite a further fall of 1,125 tons in stocks to a total of 21,660 tons. Lack of support buying by producers was blamed as the main reason for the decline and, of course, the sharp increase in witnessed some profit-taking.

Slight shortage

The cash price being at a premium over the forward quotation indicates there is a slight shortage of immediately available supplies. Nevertheless, the possibility remains that the delayed shipments from Korea could well help meet genuine consumer demand unless it is hoisted by producer or speculative buying.

Another rise of 950 tons in lead stocks, up to a total of 47,225 tons, was shrugged off by the market initially with Friday's rising trend being continued in the morning. However, absence of buying throughout a session in the afternoon causing values to close lower on the day.

LME silver stocks rose by 480,000 to 6,360,000 ounces.

OECD study on world aluminium surplus to start shortly

BY ADRIAN DICKS

THE Secretariat of the Organisation for Economic Co-operation and Development (OECD) is expected to start work shortly on a preliminary study of the world-wide problem of over-capacity in aluminium production.

The suggestion that the aluminium industry should be referred to the OECD was made by the West German Government at last week's meeting of the OECD industry committee and is understood to have been favourably received by the majority of countries involved.

No clear guidelines of action have been laid down yet, but there are hopes that a preliminary study of the world aluminium situation might be ready by early next year.

While it is emphasised here that the OECD has not yet got beyond generalities, there are several ways in which its past experience in industrial problems could be useful. The most recent is perhaps the agreement on export credits for shipbuilding reached in May, 1969, which set minimum permissible interest rates and maximum credit repayment periods.

This agreement was further tightened up in December last year, and working party under the chairmanship of the Canadian Ambassador to OECD, Mr. J. R. McKinney, is currently busy looking for ways to eliminate in the industry other forms of governmental interference with free international competition not covered by the agreement.

While there is no direct parallel between the shipbuilding and aluminium industries, one comparable area of interest for governments might be to try to agree on terms of official assistance or other protection given to those reduction plants which have been set up with official encouragement to reduce dependence on imports.

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New cut in
price of
cadmium

By Our Commodities Staff

THE reduction in the U.K. price of cadmium from 65p to 60p per pound of U.K. port announced by Imperial Smelting Corporation on Friday was yesterday followed by Noranda Sales of Canada and AZ Metals and BHAS of Australia. Other producers are expected to announce a similar price reduction shortly.

Imperial Smelting, a U.K. subsidiary of the Rio Tinto Zinc group, claimed that the lower price level restored parity with the U.S. producers' quotation. The last U.S. price cut was at the end of July but since then the change in exchange rates has made the price even cheaper.

The free market price in London remains even lower at between £0.55-£0.65, duty paid (£1.23-£1.28 a pound, cif) despite increased demand for the metal bringing a firmer tone recently. At the beginning of July, U.K. cadmium suppliers, led by Cominco of Canada, cut their fixed prices sharply from 80p to 65p a pound to become competitive with the free market quotations and evidently this policy is still being continued.

Uganda coffee output and exports down

KAMPALA, Oct. 25.

UGANDAN production of robusta coffee in 1971 is estimated at 174,844 metric tons from 187,400 tons in the previous season, the Coffee Marketing Board said.

But output of Arabica coffee, which the Board is trying to promote for export, has fallen to 14,100 tons.

Uganda's overall coffee exports through the 1970-71 crop season were well down on the previous season, entirely because of lower sales of non-quota markets, the Board said.

Total quota market shipments in the 1970-71 season amounted to 132,934 metric tons, compared with 131,899 metric tons in 1969-70. However, non-quota market shipments totalled only 50,629 metric tons against 58,719 metric tons previously.

COTTON EXPORT INCENTIVE BOOST IN PAKISTAN

By Our Own Correspondent

THE Pakistan Government is considering a proposal to increase the rate of bonus on exports of cotton from 10 to 35 per cent.

The underlying objective is to provide more incentive to cotton exporters.

Under the present arrangement, the bonus is 10 per cent on the value of the cotton at the time of export.

The proposal is to increase the bonus to 35 per cent on the value of the cotton at the time of export.

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EEC farm pricing must
await monetary pact

BY REGINALD DALE, COMMON MARKET CORRESPONDENT

LUXEMBOURG, Oct. 25.

A NEW structure of Common Market agricultural prices for the coming year is now unlikely to be agreed until after there has been an overall settlement of the Six's monetary differences. This is the view of Community experts attending the two-day council meeting of agricultural Ministers that began here this evening.

Price decisions are due to be taken tomorrow on two products—pigment and olive oil—for which the new season starts on November 1. But France is maintaining that no definite new prices can be fixed in the present confused monetary situation, in which all her partners' currencies are floating.

The French view is basically that the new price structure must be fixed on an overall basis, after a full debate on the consequences of a re-alignment of Community parities for the Common Agricultural Policy. The prices should theoretically have already been agreed three months ago.

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The French attitude is seen by some people here as being designed to put further pressure on Germany and the other members of the Community with floating currencies to return to fixed parities. On the other hand, the Dutch—whose currency is also floating—are adopting much the same line, while the Italians have so far taken up a neutral position.

The Belgians, who would probably prefer to postpone price decisions as long as possible, are openly just before a general election in which the farm vote is always important. Germany, which does not want to put off the price decisions, is not, on the other hand, so interested in the two specific products on the agenda.

The net result is likely to be that the Ministers will adopt some kind of interim agreement to-morrow, so as to allow the new season for the two products to open on time. The next season due to start is wine, on December 16, and there are still several

months before the 1972-73 season officially opens for the major products.

The Ministers' discussions concentrated on how far national aid schemes could be maintained when Community funds are made available to farmers who submit plans for the modernisation of their operations, and which farmers should qualify for the new grants.

The Netherlands, heavily national aid except the approved in Brussels, to be eliminated when the Plan goes into effect. France, on the other hand, was maintaining to-night that additional national aid could not be abolished at a stroke. The Ministers are to continue their discussions to-morrow.

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Curb on
skin imports
under study

By Our Commodities Staff

IMPORT controls on skins of endangered species of wild animals will be considered sympathetically, by the Government, the Common was told yesterday.

Mr. Anthony Grant, Under-Secretary, Department of Trade and Industry, told the House in a written reply that the Government would consider the matter "sympathetically" as soon as the Department received essential technical information from the British Fur Trade Association.

The endangered species include cheetahs, cougars, leopards and pumas.

Cyprus to buy
lamb from
Bulgaria

By Our Own Correspondent

NICOSIA, Oct. 25. THE Cyprus Government has decided to allow the import of fresh lamb from Bulgaria to meet the acute meat shortage in the island. Meat prices have soared by up to 30 per cent in the past two months, and both consumers and the Government have begun to worry about the effect of this on the rising cost of living.

A three-man delegation has now gone to Bulgaria to negotiate the import of meat. According to available estimates, imported Bulgarian lamb will cost about 12 shillings a lb (2.3 lbs)—almost half the current price of Cypriot lamb.

Cyprus is expected to import about 40 tons of fresh lamb weekly. Stockholders are up in arms against the Government's move, which they described as a "stab in the back," but the general public welcomed it. In any event, the decision is seen as a temporary measure until the new crop of lambs are born in Cyprus in about a month's time.

BARLEY LEVY
RATES

Rates of prospective import levy on barley, of £1 for October shipment and £3.50 for one for November shipment, were announced by the Ministry of Agriculture last night.

COMMODITY MARKET REPORTS AND PRICES

BASE METALS

COPPER—Closed higher on the London Metal Exchange. Prices were a little soft in pre-market trading following the increase in warehouse stocks but in the Ring, influential buying, which continued spasmodically throughout the day, pushed forward metal up to £42.25. News of a strike at Cerro de Pasco in Lima, Peru, came too late to have any major effect on prices. The market was a little subdued owing to the closure of the New York Exchange for Veterans' Day. Turnover 10,600 metric tons.

Henry Gardner and Co. reported that in the morning wirebars cash traded at £42.15 51, early Jan. £42, mid-Jan.

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GEORGETOWN, Oct. 25. — NA is seriously considering negotiations for the establishment of a new deep water port and the acquisition of a new shipbuilding yard, a report in the *New Nation*, the national Congress paper, said today. The report, which was written by a committee headed by the late Senator Bernard Mottor, who advised the Government on maritime matters, recommended that a new port be built on the Essequibo River east of where a natural deep water harbor has been discovered, and a further recommendation was made to build a 50-mile railway to link the new port with Wismar, in the bauxite district up the river. The report also said the Government should be advised to acquire the land on a rental basis, but it made no mention of Mr. Mottor's visit which is due to last until after 4.

9m. Amazon
velopment

Our Own Correspondent
RIO DE JANEIRO, Oct. 25. — A \$30m. expansion plan for the Amazon port of Santarem has been approved by the Ministry of Transport. The plan, which has been announced by the Minister of Transport, is situated at the mouth of the Amazon and the Rio Negro, at the beginning of the BR-165 trans-jungle highway to Cuiaba, and is a strategic move in the Government's Amazon Basin development. The plan will include the construction of piers for 10 cargo vessels with up to nine metres, and the barge and tug system is being developed for transport throughout the area. A terminal will also be built for hovercrafts. The area behind the port will be developed for commercial and industrial use, the announcement said.

Poll shows Nixon's popularity is rising

BY GUY DE-JONQUIERES WASHINGTON, Oct. 25.

PRESIDENT NIXON'S popularity with the U.S. electorate is now on an upswing from the doldrums into which it sank during the summer and is rising at its highest point since the beginning of this year. The latest Gallup poll, taken immediately after the President announced "Phase Two" of his economic programme on October 7, shows that 54 per cent of American voters believe he is handling his job well. This is a sharp improvement from the last results, taken in the final week of August, when he received only 49 per cent approval. Mr. Nixon's popularity rating is still below the 56 per cent with which he started this year. But the upward trend is an encouraging sign for him, his advisers and the political staff which he is assembling to run his campaign for the elections in November of next year. The improvement apparently reflects growing confidence that the President's dramatic switch in economic policy will work. It also indicates approval of his stewardship of foreign policy, notably his cultivation of better relations with Peking and the continued winding down of the war in Vietnam. His decision to visit Moscow was announced after the poll was taken. That President has laid his plans carefully, so that he should be able to point to solid achievements during the final year of his first term in office. If things go well, the economy should be seen to be improving by November of next year, U.S. involvement in Indochina will be in its final stages or ended completely, and the visits to Moscow and Peking should enhance Mr. Nixon's prestige as a diplomat. The President warned yesterday that these visits should not raise unrealistic expectations. But even if the Peking trip yields little of substance, it is thought in Washington that there is a good chance the President will be able to bring back some tangible results from Moscow—possibly the signature of an initial SALT agreement. Barring some unforeseen catastrophe, such as a major Communist onslaught or the collapse of the Thieu regime, Mr. Nixon should be pretty well unassailable over Vietnam. Significantly, Senator George McGovern, one of his chief critics, has already started to broaden his presidential campaign platform away from the single issue of the war. The major, and in political terms potentially most damaging uncertainty hanging over Mr. Nixon's election prospects is the economy. He has undoubtedly reaped some short-term benefits simply by deciding to take tough action, both on the domestic and the international front. But the critical question is, even if the President achieves the objectives of his new economic policy, are they the right recipe for electoral success?

Cable TV chief found guilty of extortion

BY JUREK MARTIN NEW YORK, Oct. 25.

THE future of Mr. Irving Kahn, the dominant personality in the American cable television industry, remains in doubt here following the verdict by a federal jury last week that he had been guilty of bribery and extortion in obtaining a cable television franchise in Pennsylvania five years ago. Already a proxy fight is looming for control of Teleprompter, the largest U.S. CATV company, of which he is chairman and chief executive officer. The challenge to Mr. Kahn is being launched by Mr. Jack Kent Cooke, the celebrated American sports promoter who owns 18 per cent of Teleprompter's shares. Mr. Cooke has already succeeded in gaining some time for his proxy fight by obtaining a court order further delaying the company's annual meeting, which had been set for November 24. Mr. Kahn and his company, which was also found guilty of the federal jury, are due to be sentenced on November 30. Mr. Kahn faces maximum sentences of up to 20 years in prison and a fine of up to \$250,000. He has said he will appeal and is confident that it will be upheld. Earlier this year, Mr. Kahn had said he would resign from Teleprompter pending the outcome of the case, but he subsequently changed his mind and stayed at the helm of the company. The Teleprompter bribery case, which involves the town of Johnston, Pennsylvania, and in which the decisive turn of events was the last minute plea of guilty by the mayor of the town to charges that he took part in graft conspiracy, may well turn out to be of enormous importance to the emerging cable television industry.

EEC hits back at U.S. claims

By Lorettes Oblager BRUSSELS, Oct. 25.

REPLYING TO U.S. charges of "unfair trading practices," the Common Market Commission today published a detailed list of figures to show that the U.S. had certainly not suffered from the existence of the Community. Pointing out that EEC tariffs were on average lower than those of the U.S., the Commission said that "the growth of American exports to the Community has been faster than towards many other areas of the world." According to U.S. figures they had risen by 111 per cent between 1960 and 1970, and U.S. exports to EFTA countries had risen by only 33 per cent during the same period. Moreover, its subsidiaries in Europe sold about 2.5 times as much again as the U.S. was exporting to the EEC. The Commission also noted that the EEC had run a constant deficit in trade with the U.S. amounting to \$3,400m. in 1970.

Unsupported by facts

On agriculture, the Commission said that U.S. charges about protectionism were not supported by the facts. In 1958, U.S. agricultural exports to the Six had amounted to \$885m. By 1970 they had more than doubled to \$1,982m. "During the past six years, American agricultural exports have gone up 25 per cent to the Community, compared to only 20 per cent to the rest of the world." To counter U.S. complaints about non-tariff barriers to trade, the Commission in turn drew up a list of American sins in this field, including quantitative restrictions, the American selling price system, and the Buy American Act. It also said there was "no evidence to date" that any third country's trade had been harmed by EEC preferential agreements with Mediterranean and developing countries. The Six's exports to these countries had gone up by 57 per cent since 1958, while U.S. exports had risen by 91 per cent.

The decline in the American trade surplus in recent years was "due primarily to domestic inflation and low productivity," the Commission said, and moreover trade "does not explain the American balance of payments deficit," which was caused mostly by the outflow of capital.

MEXICO The President has few allies

BY ALAN RIDING IN MEXICO CITY

VOX POPULI seems to be neatly divided whether the extreme Left or the extreme Right was responsible for Mexico's first political kidnapping. Both extremes seemed to have sufficient political motive for doing it and there are plenty of people "in the know" who support one or other version. The known facts of the case prove nothing. About 9.30 a.m. on September 27, Sr. Julio Herschfeld Almada, a 54-year-old millionaire industrialist who is currently director of Mexico's airports system, was taken from his car by three armed men and a woman. They left behind two stencilled sheets demanding a ransom of 3m. pesos (about £100,000) to be used "in the cause of the revolution." But eventually account had to be given of the new conditions prevailing in Mexico since 1968. This resulted in the selection of Sr. Echeverria as the presidential candidate of the ruling Institutional Revolutionary Party (PRI). From the moment he left his desk as Minister of the Interior, the 49-year-old Sr. Echeverria showed signs of being a reformer. During his campaign, he travelled the length and breadth of the country even though he was virtually without an opponent. He encouraged people to discuss their problems in the open and, once in office, he called for constructive criticism of the government. He tried to open a dialogue with the alienated student movement and showed his good faith by releasing most of the 1968 political prisoners. He attacked corruption in the government, the PRI and the unions. He called for redistribution of income and increased luxury taxes to prove his point. Mexico's massive balance of trade deficit required attention so he risked unpopularly slowing down the economy. In brief, he took the first steps towards turning Mexico into a modern and progressive society where stability is not a product of repression. The energy and challenge of the Echeverria administration has thrown the country into a flurry. On the left, the extremists stepped up their guerrilla activity, while the moderates decided to take a chance. Led by two writers, Sr. Carlos Fuentes and Sr. Octavio Paz, and by an engineering professor Sr. Heberin Castillo (released from jail five months ago), they formed a political organisation to challenge the PRI's monopoly of power. The leaders have traditional leftist views about the country's problems, although they insist their programme will be determined by "the aspirations and opinions" of the masses and will not be imposed from above. The group accepts Sr. Echeverria's good faith, but it recognises the innate conservatism of the PRI and does not believe the party capable of basic challenge. Sr. Echeverria, on the other hand, has encouraged this before this rare chance of new leftist movement. He has form is lost.

Kidnappers

The note was signed by the Frente Urbano Zapatista (named after a Mexican revolutionary, Emiliano Zapata), though an anonymous caller later told a newspaper that the Movement for Revolutionary Action was responsible. In any event, the ransom was delivered to the kidnappers. The Government provided the money but was eventually repaid by the family. Sr. Herschfeld was released unharmed after 60 hours' captivity. The public's first reaction was that terrorism had finally reached Mexico, that this country's traditional immunity to guerrilla activities had abruptly ended. In fact, the kidnapping seemed to be the natural climax to a recent wave of assaults and bank robberies for which the extreme Left had been blamed. Several guerrilla groups, formed in 1968 after the non-violent protest movement had been brutally crushed by the Army, have begun to make their presence felt in the past few months. Though they are small in number and no real threat to the Government, the psychological impact of their appearance has been enormous. But on the kidnapping case, there is no proof that the left

Peru's \$600m. mine plans

LIMA, Oct. 25. PERU'S state mining company, Mineroperu, will mobilize capital totalling \$600m. during the next five years to carry out six mining projects its president, General Juan Bossio, announced. General Bossio said the projects include development of three copper deposits, exploration of a fourth deposit and construction of refineries and smelters in Lima and the southern port of Ilo. Financing has been completed for only one project, a \$65m. development of the Cerro Verde deposit in the southern state of Arequipa. British Smelter Constructors has signed an agreement to develop the deposit on behalf of Mineroperu. AP-DJ.

Brazilian auto sales

BY OUR OWN CORRESPONDENT RIO DE JANEIRO, Oct. 25. SALES of the Brazilian automobile industry grew 22 per cent last year. Total production was 355,942 vehicles compared with the 299,017 for the same period last year. Volkswagen accounted for Cr.3,468.9m. of this year's figure, around 45 per cent of the total, followed by Ford-Willlys with Cr.1,365.4m., around 15 per cent, year reached Cr.7,773m. against with 209,056 and 67,589

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Export News

BL dealer shake-up bears fruit

SALES of British Leyland cars in Austria during the first nine months of 1971 totalled 9,148 units, 33 per cent up on the 6,819 units sold in the corresponding period of 1970.

Commenting on the sales increase Mr. Karl Rohan, managing director of British Leyland Austria, said "This success is largely due to improvements in our dealer and workshop organisation. During the past financial year most of our dealers considerably enlarged their facilities and our marketing programmes have been designed to provide maximum customer satisfaction through excellent after sales service."

Also in Europe, the British Leyland subsidiary firm in Belgium reports a steady increase in its penetration during the first nine months of operation.

In the 1971 third quarter (July to September) British Leyland cars captured 3.3 per cent of the Belgian market, compared with 2.4 per cent in the first quarter and 3 per cent in the second quarter.

Mr. Bryce Couzens, managing director of British Leyland Belgium, attributed the improvement to "a combination of increased supply from the company's plant in Senefle and a re-franchising policy that allows the 175 or so British Leyland dealers in Belgium to sell the company's full line of mini, medium, sports and luxury car models."

A contract to the value of £400,000 has been received by the Bowthorpe Power Equipment Division, Banbury, a Bowthorpe Holdings Company, for the supply of high-tension outdoor switchgear for shipment to Brazil.

SCIENTIFIC INSTRUMENTS

Cambridge bids for the low budget R & D market

BY DAVID CURRY, EXPORTS EDITOR

Cambridge Scientific Instruments has developed a low-price scanning electron microscope which, it claims, opens up an entirely new world market.

The Stereoscan 800, selling at about £10,000, is pitched at two markets: the bottom end of the research and development market for smaller laboratories and as a relief machine for more complex instruments; and even totally, at the quality control market, expected to emerge primarily in the U.S.

The machine, which produces a three-dimensional television-type picture, is a complement to the company's S4 Stereoscan which already claims more than 50 per cent of the world market for scanning electron microscopes.

It gives magnifications up to 50,000 times and is claimed to be specially suited to industrial and routine research problems, such as sample checking, quality assurance, production sampling, and examination of wear and damage.

U.S. award

The Stereoscan was launched in the U.S. early this year and was one of three British products to collect an award to the IR-100 competition as one of the 100 most significant new technical products to be launched on the American market.

It has just completed a 5,000 miles sales tour of Europe in a mobile test bed, proving the company claims, that it can be operated successfully in rudimentary conditions.

Mr. R. H. Davies, managing director of Cambridge Scientific Instruments, a member of the George Kent group, said that this year the company would reach a £3m turnover in sales of electron-probe equipment.

In 1965 electron-probe sales of the Stereoscan and Microscan X-ray analysers, totalled £350,000. Since then the company has sold instruments worth £11m, of which £7m have been for export—more than 50 per cent of world production.

The U.S. takes some 30 per cent of production. IBM has bought 18 Stereoscans, NASA has taken eight and Bell Telephone four.

Applications of the S4 include the study of moonrock, cancer research, forensic crime detection and industrial research in, for example, the oil and fibres fields.

The company has just booked orders for instruments and equipment worth £175,000. Russia has ordered a Stereoscan and £75,000 of equipment and the University of Barcelona has given Cambridge Scientific Instruments its first Spanish sale with contracts worth £60,000 for a Stereoscan 4 and Microscan 5.

The company has pioneered the commercial manufacture of electron-probe equipment, drawing on development done at Cambridge University. Its two basic products in this field are the scanning microscope, which produces a three-dimensional picture of a material (the ordinary electron microscope can only handle a small silver of material and produce a two-dimensional picture) and the static probe X-ray analyser used for determining the chemical composition of materials.

At the recent Technosprint Exhibition in Moscow, Instron, of High Wycombe, obtained orders to the value of £135,000 for instruments from its range of materials testing equipment.

Instron was awarded a diploma by the All Union Chamber of Commerce in Moscow for its "outstanding participation" in the specialised exhibition.

THE THIRD WORLD

Sudanese paint deal

CARSON-HADFIELD, the paint manufacturing division of the Bestobell group has signed a licensing agreement with a Sudanese company for the production of decorative and industrial paints in the Sudan.

Under the agreement, made with Nile Paintworks Company, of Omdurman, near Khartoum, Carson-Hadfield is to provide technical, manufacturing and marketing advice. Carson-Hadfield personnel will spend sufficient time in Omdurman to produce paint formulations which will be adapted to meet the particular requirements of the Sudanese climate.

The company already has a series of similar licensing arrangements covering the Lebanon, Ethiopia, Jordan, Kuwait, and Sierra Leone. Agreements are also being negotiated in a number of other Middle East and European countries.

A £22,000 contract has been

awarded to Plessey Telecommunications for the installation of additional telephone exchange equipment in Swaziland. Under the contract, Mbabane exchange is to receive a 400-line extension, three additional manual switchboard positions, and traffic relief equipment.

L. A. Rumbold, makers of airline seats, a member of the Bristol Street Group, has won export orders worth £206,000.

Much of this new business is derived from airlines based in the Far East. Passenger seats for the new Malaysia Airlines fleet of Boeing 707s and for Total Airways future HS.748s form part of the increased order book, as well as seating for the BAC 1-11s due for delivery to Air Pacific and Merpati, Indonesia.

Also included are additional seats for Alitalia's Boeing 747 aircraft and for a further three Con-quest 990s to be operated by the Spanish charter airline, Spantax.

Continental highway for Africa

By David Curry

THE Overseas Development Administration is arranging for the London consulting engineers T. P. O'Sullivan and Partners to undertake a pre-feasibility study of the proposed Trans-Africa Highway. The United Nations Economic Commission for Africa (ECA) has overall responsibility for the direction of the project, which would span the "waist" of Africa from the Indian Ocean to the Atlantic.

At an ECA meeting in Addis Ababa earlier this month an offer by Britain to conduct a pre-feasibility study was accepted. Offers of assistance to the project as a whole came from a number of other countries.

The pre-feasibility study will involve an assessment of the economic significance of the route, ranking alternative routes in order of economic preference, carrying out cost-benefit surveys and also overall cost analysis.

A study of the development plans and trade patterns of the countries affected will be made to establish estimates of transport demands and consequential estimates of construction and maintenance standards that will be required.

The highway is at present defined by the ECA as a road link between Mombasa and Lagos, passing through Uganda, Congo Kinshasa, the Central African Republic and Cameroon. It would be some 4,000 miles long with about three-quarters of its length already classified as a roadway, with substantial improvements needed, and the remainder to be constructed.

It is expected the consultants' report will be presented to ECA in time for the Commission to put definite proposals and recommendations to the next meeting of the Highway Co-ordinating Committee, due to be held in Bangui, Central African Republic, next March, when the next stages of the project will be discussed.

The countries involved in aiding the highway are U.K., Belgium, West Germany, France, Italy, Japan, Netherlands, Sweden and the U.S. Germany and Italy are understood to have reserved their position pending further study of the project.

THE COMMON MARKET—WEST GERMANY

Where there's a will there's a way

Peter Strauss, a West German management consultant, argues that British companies have spent too much time waiting for political decisions about the Common Market before trying to sell in West Germany. There's nothing to be afraid of in the market, he maintains.

estimates of the potential volume of business a British company can do in Western Germany. It must be borne in mind that Western Germany is an excellent basis for business with Austria, Switzerland, Holland, Denmark, Sweden and Eastern Germany. (British exports to Eastern Germany, for instance, £17m; West German exports to Eastern Germany close on £300m. In 1970.) Austria buys £91m. worth of goods from Britain, but some £60m. from Western Germany.

Any more permanent form of establishment a British company may set up in Western Germany might, therefore, well be also used for trade with those countries and, more specifically, bring servicing, assembly, or production facilities closer to those markets, not only geographically but also by making use of established German contacts.

For business in Germany it is, of course, very important that a British company has people speaking very good German, if they are English, or very good English, if they are German. Translators and interpreters will help a lot and it would be foolish to start without them but in the long run the organisation itself must be as fully bi-lingual as ever possible.

It may be difficult for an Englishman to realise both that the English-speaking Germans he meets everywhere are not representative of the Germans as a whole (and sometimes their English is not as good as at first thought) and that he cannot really understand what they tell

him even in the very best of circumstances, the time and the expense of listening to them enough and of asking questions.

Sophisticated products, backed up by good agents and distributors, world round are essential. If the exporter is a very enthusiastic about the effort and money into this city, if the exporter is a major principal and allows plenty of money, time and effort to be not like build the service organisation his product needs and does in terms of profit and potential.

Very often it will be a idea to build an independent vice organisation. People prepared to pay for good and good money can be made of it.

Intricacies

It is obvious that training education is a major factor, home and abroad. But important to get people versed in the intricacies of German way of life and business. Very often this will mean as Germans to train staff agents. This involves, of course, training the trainers in the particular field of business which they are engaged.

Too often people again of back with the excuse that should wait for the final decision, the final terms agreed and published in a properly explained and mented upon by all authorities.

The opportunities are there to be seized anyway, even if there are delays. Britain's joining—and the transitional period will be quite a long one—should not be a excuse—that should only come one more major reason for quickly and efficiently building up British sales in Germany.

Every penetration of the German market starts with the particular homework for the particular business before it is spent on offices, salaries, and training. While doing it, many of problems which look like m ones will be better understood and lose their menacing. The sooner one starts the sooner one starts the sooner this will happen.

ECGD sharpens our selling edge overseas.

'A company of our size could carry bad debts risks on its exports. But that would limit the entrepreneur spirit of our sales force.' Mr J.H.N., chairman and managing director of a large Sheffield hand tool group.

In an industry still dominated by manufacturers of specialized product ranges, this lively group has, through mergers, seized the opportunity to move into position as a major international manufacturer of a much wider range of hand tools. Export sales have surged forward from £1 million-plus in the early 'sixties to a projected £4.5 million for 1971.

Bolts from the blue

Although no unnecessary risks are taken, ECGD cover against bad debts overseas enables group salesmen to be positive rather than ultra-cautious. It protects, too, against 'bolts from the blue', such as when the group's agent of 40 years standing in a European country went bankrupt leaving an outstanding account of £36,000.

Credit for stocking

Another advantage for ECGD policyholders is the Comprehensive bank guarantee, under which bank finance up to two years is available at Bank Rate plus 4%. This enables, for example, distributors' stocks to be increased rapidly in growth markets—an important ECGD plus for this group which sells on quality and service in the competitive markets of Europe and North America.

An ECGD policy could help your company sell more competitively—and without risk. Talk this week to your local ECGD Manager.

Export Credits Guarantee Department:
London, Bedford, Belfast, Birmingham,
Bradford, Bristol, Cardiff, Crawley,
Edinburgh, Glasgow, Leeds, Liverpool,
Manchester, Newcastle upon Tyne,
Nottingham, Reading, Sheffield.

ECGD
Export with an easy mind

Small concerns

It is very often overlooked that trade between France and Germany, for instance, grew by more than 200 per cent. both ways within five years after the formation of EEC, long before the so-called trade barriers had actually been removed, and it continued to multiply in the following years, although some of the barriers exist to this day.

What happened was that, on being told that a true Common Market was now on its way, not only large but literally thousands of small and medium-sized companies within the EEC simply stopped being intimidated by barriers, restrictions, language difficulties and complicated red tape. They took heart to tackle them properly and in a very practical manner started to build businesses for themselves in the other EEC countries.

Certainly, quite a large proportion of the growth in trade was achieved not by big companies selling mass-products, but by enterprising smaller companies, often with specialities, little known in the neighbouring countries and therefore quite unaffected by the duties and restrictions which still applied, with very special know-how in particular fields, and with the important advantage of flexibility and personal effort.

Sophisticated

Something very similar could happen to U.K.-German trade if the British businessman would be better aware of realistic opportunities which the second largest import market of the world—Western Germany—offers to-day.

It is, admittedly, quite a sophisticated market which must be properly studied, and this can best be done by having a leg in the German market—regardless of whether selling through agents/distributors or through an organisation wholly or partly owned by the British principal, may be the answer to the actual sales problem. The company does not have to be big. It does not have to spend a lot of money. When making preliminary

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Insurance Brokers and Lloyd's Underwriting Agents
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Major Insurance Broking Companies:

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HOGG ROBINSON & GARDNER MOUNTAIN (U.K.) LTD.
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LIFE & PENSION:
HOGG ROBINSON & GARDNER MOUNTAIN (LIFE & PENSIONS) LTD.
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THE CREDIT INSURANCE ASSOCIATION LTD.

Points from the Statement of the Chairman, Mr. Francis Perkins, presented at the Annual General Meeting held in London on 25th October.

PROFIT & DIVIDEND: Profit attributable to Ordinary shareholders for the year is £314,000 as compared with £802,000 in the previous year. A final Ordinary dividend of 9p. per share is recommended which, with the interim already paid, makes a total for the year of 12.5p, the same as for the preceding year.

PROSPECTS: I am confident that we shall maintain our share of the business coming into the market, both in the United Kingdom and from our considerable worldwide connections. Furthermore, with the changes in management and administration which have taken place, the Broking Group is well placed to continue further growth within its existing overhead structure and has the ability and the facilities to obtain a greater share of the considerable business potential offered.

I anticipate that the marked improvement in the results of the Underwriting Agencies will be maintained next year.

SUMMARY OF GROUP RESULTS

Year ended March 31st	1971	1970
Group Profit (before tax)	1,774,000	1,979,000
Earnings for Ordinary	914,000	802,000
Ordinary Dividends	806,000	806,000
Cover for Dividend	1.5	1.3

Subsidiary or associated companies operating in:
UNITED KINGDOM • FRANCE • ITALY
BELGIUM • CANADA • AUSTRALIA
NEW ZEALAND • PERU • VENEZUELA
WEST INDIES • EAST CENTRAL
WEST AND SOUTH AFRICA

Copies of the Report and Accounts containing the Chairman's full review can be obtained from The Registrar, Baring Brothers & Co. Limited, Bourne House, 34, Beekman Road, Beckenham, Kent BR3 4TU.

THE CHURCHILL

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ALLOWS HOTEL

SAY
PYE-DAY



European
NewsSchiller
expects
to meet
Giscard

Christopher Lorenz

FRANKFURT, Oct. 25.

FR. KARL SCHILLER, the German Economics Minister, expects to have productive talks with his opposite number, M. Giscard d'Estaing, at tomorrow's meeting in Luxembourg of the finance and economics ministers. The German Minister stated tonight.

There had been reports in the few days that M. Giscard did not intend attending tomorrow's meeting, and would prefer to talk to the visiting delegation in Paris, but German Minister is clearly going to attend.

Prof. Schiller wants to see him for individual talks, and the Council of Ministers was not clear to-night.

Prof. Schiller's statement was at a Press conference in Frankfurt, at which he announced that the Ministers of Group of Ten would meet on November 22.

He did not say where talks would be held, but was close to him indicated Rome is the most likely place.

The Minister told the Press conference after a meeting of the Bundesbank Council in which he took part, that an international realignment of titles should be achieved as far as possible. Otherwise the inflation of certain economies would lead to an eventual realignment of the dollar.

He also said that the Group of Ten would meet on November 22, 23. He did not say where talks would be held, but was close to him indicated Rome is the most likely place.

The main aim of the meeting to approve a Commission report on short-term economic policy for 1972, which is intended to provide the basis for better co-operation between the six in the framework of their national budgets for next year.

The Ministers are to meet in Paris on Thursday week, November 4, to discuss wider aspects of international monetary problems at a session of their regular quarterly discussions on strictly informal basis.

But the expected presence of tomorrow of both Prof. Schiller and M. Giscard has given rise to some speculation that they may be contacts outside a formal council meeting tomorrow on the differences of view on monetary affairs between their two governments.

Negative growth rate
predicted for Germany

BY MALCOLM RUTHERFORD

BONN, Oct. 25.

WEST GERMANY may have a negative growth rate for most of the next year, according to the latest joint report of the country's main economic institutes, published today. The report predicts a continuing fall in investment, in new orders to industry and in the use of industrial capacity, as well as a perceptible rise in unemployment. In these circumstances, it says, the immediate aim of economic policy must be the avoidance of recession.

The institutes, nevertheless, are notably favourable to the present policies of Prof. Schiller, the Economics Minister, and support the floating of the D-mark because they claim it will contribute to reducing domestic inflation.

If necessary, they say, the Bundesbank should be ready to sell off some of its massive dollar holdings in order to keep the de facto revaluation rate against the dollar high.

The justification is that this would help domestic stability by reducing the possibility of rising prices because of increased competition from abroad, and would also bring down the level of wage settlements. It would further help towards an improvement in the American balance of payments, because Germany would be more open to American exports.

The institutes' projections about the German economy are based on three assumptions: 1—The dollar will remain at around 10 per cent., either by continuing to float or by the fixing of a new parity.

2—The Government will not make use in 1972 of its available anti-cyclical funds to prime the pump.

3—Interest rates will continue to fall.

The second assumption is highly questionable; however, on this basis the institutes project that for most of next year there will be no real growth in the gross national product. Only a possible recovery in the latter part of the year will bring the real growth for the year as a whole to 1 per cent.

Industrial investment in new equipment next year will be about 7 per cent. down in real terms on 1971. Private consumption will rise nominally by 6.5 per cent.—after 11 per cent. in 1971, but in real terms by only 2 per cent. The annual rise in the cost of living will slow down, but only to about 4.5 per cent.

Rising unemployment will continue for some time to come, though admittedly from a very low base. The institutes suggest that the number of employed will drop next year by about 1 per cent. Much depends, however, on the outcome of wage negotiations with the metal working union and the public services union.

To avoid a recession, the majority of the institutes recommend an easing of credit policy and an early repayment of the temporary surcharge on income and corporation tax. Both these measures are likely, at least in the course of next year.

On the international monetary system, the institutes repeat

their familiar preference for some kind of "crawling peg" arrangement, which would allow small but frequent parity adjustments. They say it should be accompanied by an agreement on an international code of behaviour to prevent the rates being unduly manipulated by central bank intervention.

The main German objection to this has always been political, on the grounds that it is incompatible with the Common Market agricultural policy. However, if the institutes were right when they said in a Press conference today that the CAP is practically dead, the crawling peg idea may be in for a revival. It is known to be favoured in high German places.

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THE NIXON ECONOMIC PLAN

Italy counts the cost
in terms of jobs

BY NORRIS WILLATT IN MILAN

THE 10 PER CENT. U.S. import surcharge imposed by President Nixon as part of his "crash" programme to solve the American balance-of-payments crisis could, directly or indirectly, cause loss of employment to 150,000 Italians.

This is a preliminary figure projected by the Italian Government, which like others in Western Europe has been trying to calculate the cost of the American emergency programme to its economy. The bald statistic itself is more startling than, in fact, the situation warrants. Not so many people are expected to lose their jobs altogether. For many the impact may mean only short-time working, or merely the end of overtime.

Nevertheless, the surcharge is viewed with dismay in Italy, even if the effect of it upon the national economy is less drastic and has received less publicity than the effects on such countries like Japan and West Germany. Moreover, the Italians are particularly mortified by the fact that the new obstacles to international trade now being imposed by the U.S. have come when Italy's exports to that country have reached close balance with imports.

In 1970, as the result of a sustained export drive, Italian shipments of merchandise to the U.S. amounted to some \$1,554m., imports from the U.S. were valued at \$1,534m. This produced a trade deficit of \$20m., but it was the third year in a row in which the exchanges had been quite close to equilibrium. This situation was in sharp contrast to that in the middle 1960s. In 1963, for example, Italy's exports to the U.S. amounted to less than \$500m., and imports were more than \$1,000m.

Working back from this figure, the Government had reckoned that this would cause a drop in employment of between 40,000 and 50,000 people in the export industries, some of whom would be laid off, others put on short-time, and others deprived of current overtime. But this would be only the direct impact; there could be indirect effects on suppliers, shippers and others which could bring the total affected to 150,000, or even to 170,000.

This would make more difficult the task of the Government, which already has unemployment and under-employment problems on its hands because of a slow-down in the domestic economy. In recent years, the U.S. has, in fact, been an important safety-valve, its increasing absorption of Italian exports have helped to relieve the pressures for social reforms building up within the organised labour movement on the Peninsula. Now, the sur-

charge and its effects threaten to add to the pressure.

According to Signor Cattin, Italy can take a measure of comfort from the fact that its exports to the U.S. are heavily weighted in favour of consumer goods, such as shoes, stockings, clothing, textiles, which are less likely to be affected by the surcharge than producer goods, especially as the latter will also be hit by President Nixon's plan to grant tax relief to domestic concerns which buy their machinery and equipment in the U.S.

Official concern on the subject was expressed recently by the Italian Minister of Labour, Signor Donat Cattin, who also explained how he had arrived at the figure of 150,000 workers who were likely to suffer. The surcharge, he said, would have an impact on about 25 per cent. of Italy's total exports to the U.S., worth between \$250m. and \$300m.

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some of their greatest competitors, such as Japan, Hong Kong, Taiwan, have agreed to limit exports to the U.S. in return for removal of the 10 per cent. surcharge from most types of textiles. They still will labour under cost disadvantages, especially taking into account the devaluation of the dollar.

Dollar devaluation will also hurt the shoe industry of the area, which sends about 20 per cent. of its exports to the U.S. Other industrial communities in the region also have their worries. For example, in Pavia, whose exports of shoes to the U.S. in the period 1963-1970 increased from \$2.7m. to \$5.7m. per annum (more than 33 per cent. of the total of shoe exports to the U.S. from Lombardy), the surcharge has aroused pessimism. The reaction of manufacturers of shoe-making machinery and sewing machines has also been one of pessimism.

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Common Market Debate

THIRD DAY

Mr. Geoffrey Rippon, the Government's chief negotiator, admitted in the Commons yesterday that the total cost of entry into the EEC to Britain's balance of payments could be as high as £500m. a year by 1977. Under pressure from the Labour benches, Mr. Rippon agreed that he had given this figure to lobby journalists—though, he hastened to add, he had also told them that the "dynamic effects" of entry could bring an overall improvement of £1,700m.

The information aroused renewed interest in the continuing debate even though Mr. Rippon, with due modesty, claimed no precision for his estimates. He only qualified: "The terms we have agreed ensure that there will be no sudden or intolerable burden on our balance of payments before we have the full advantage of the dynamic effects of entry." But what would happen after 1977? "Irrelevant,"

retorted Mr. Rippon. Irrelevant because no decision could be taken against the vital interests of any member.

Mr. George Cunningham, from the Labour benches, thought that only went to prove that it would be impossible to change the Common Agricultural Policy. And amid great hilarity, Mr. Rippon replied: "I listened to your apology. This is mine."

"Don't apologise," Labour MPs shouted in pardons mirth. And, in fact, Mr. Rippon, in a patient and peaceable mood despite the interruptions, did not.

The atmosphere was markedly less forgiving during Mr. Michael Foot's speech from the Opposition front bench. Dr. David Owen, a former Labour junior Minister and a pro-Marketeer, was advised to join the Conservatives by some of his

Labour colleagues when he interrupted Mr. Foot—"before you get carried away with your own rhetoric." And later Mr. Foot reminded anyone who needed it: "I voted against my party on occasions. But I cannot recall ever doing it to keep a Tory Government in office."

Mr. Foot warned the Government: "The instinct of the British people ought not to be despised by those who seek to govern them." That instinct had survived the pro-Market campaign, he said, mainly because it recognised the loss of sovereignty that would ensue. The Commons and the people would have less power over a wide range of policies, said Mr. Foot. With Mr. Heath at the helm, the country was now watching "the most daring display of seamanship since the wreck of the *Hesperus*."

Philip Rawstone



RIPPON... no decision can be taken against the vital interests of a member country.



FOOT... decisions taken by undemocratic bodies.

Rippon admits balance of payments cost could be £500m.

MR. RIPPON said he had noted the special concern which had been expressed about New Zealand's balance of payments towards the Commonwealth, and not less so, both for the members of the enlarged Community, and most of the members of the Commonwealth.

It was significant that at the end of the negotiations, Mr. Rippon said, the Commonwealth Secretary-General had said that the Commonwealth was not less so, both for the members of the enlarged Community, and most of the members of the Commonwealth.

Export prices

Mr. Rippon said: "We have negotiated terms which have satisfied the New Zealand Dairy Board and the Commonwealth sugar exporters. The only reservation relates to the pricing formula which has been agreed with the Community."

Mr. William Molloy (Lah. Ealing, North) asked why Mr. Rippon did not give the full view. "You should state the views of the official Opposition in New Zealand which before very long could well be the Government. Do you not think you should state the case as put forward by Mr. Norman Kirk?" (Leader of the Opposition in New Zealand).

Mr. Rippon replied that on October 9 Mr. Kirk was reported to have said that prices for New Zealand butter could drop sharply if Britain joined the Common Market.

But another spokesman had said it was foolish to say that New Zealand would lose heavily, because average export prices had been so high to recent months.

Mr. Rippon referred to a claim by Sir Robin Turpin (C. Thirsk

stemmed "from the mistaken conception that the Community is inward-looking and protectionist."

He said: "I do not believe this is the fact. In truth the Community is in the forefront of the developed nations in its regard to trade and aid with the developing world."

"I foresee in the future that Britain's developing Commonwealth partners who stand most in need will have continuing relationships not only with us but also with our prosperous European partners both in the fields of trade and aid, including investment."

The House should also take note of EFTA's general satisfaction.

Dealing with fisheries Mr. Rippon said that agreement might only be reached after enlargement on the balance sheet which were needed and acceptable to all concerned.

"We will not agree to any arrangement which does not satisfactorily protect our legitimate interest," Mr. Rippon said.

"There is a clear understanding that we must either have an agreement on a new regulation which is satisfactory to all the applicants as well as the existing members, or if we cannot achieve that, the Community will have to accept we will maintain the status quo."

"If we do that, any question of membership, as distinct from the question of enlargement, would be dependent on agreement by all parties concerned."

After Mr. Rippon had turned to contributions to the Community Budget Mr. Denis Healey, Foreign Secretary, intervened.

Mr. Rippon had identified the cost of changes in industrial tariffs as between

Inflational voice

"Surely it is the case that the Government did make an estimate, that it was £200m. to £300m. and this brings the total impact cost of entry to £500m. a year in foreign exchange, on the Government's own calculations, in 1977."

Mr. Rippon said: "What you said is quite untrue. All I have said is, as stated on December 16, that I always believed at the end of the day, the balance sheet shows a positive advantage in our favour."

"As far as the other allegations are concerned about private meetings with journalists, that is not a true statement of the position. It really is no good producing statistics just as extension of lines on a graph."

On Britain's possible contributions to the Market after 1977, Mr. Rippon said that we had to hear in mind that we would not be joining a static Community. We would have a full and influential voice in the decision-making process of the Community, including the shaping of the Budget.

We would be pressing for developments in regional, industrial and social policies which would bring us big benefits.

Mr. Wilson pressed Mr. Rippon on figures he had given to journalists that had not been given to the House.

Mr. Wilson asked why, if Mr. Rippon had given them the very wide range of figures which he claimed, all the leading journalists writing for the "heavies" had seized on one particular figure.

Mr. Rippon said one figure given was that we should have an overall improvement of £1,700m. in balance of payments by the end of the period. But as well as quoting a plus figure of £1,700m. they had also quoted a minus figure of £500m.

"More and more people are coming to realise that the real issue is whether Europeans in the 20th century are still creative enough to add another element to their political activity, whether we can have some form of European unity without sacrificing our national diversity," Mr. Rippon said.

Cast adrift

What happened after 1978 was irrelevant because no member of the Community was going to impose an unacceptable burden upon us or upon any other member.

"In practice no decision can be taken against the vital interests of a member country. That is really at the heart of the various arguments on sovereignty and the provisions of the Treaty of Rome."

On our decision on Thursday depends whether we catch up or whether we cast adrift. It is a decision only Parliament can take. We have a great responsibility and a great opportunity.

"In this House this week we stand to gain for future generations through peace, that unity of Europe which our forebears vainly if heroically sought by arms."

Erosion of sovereignty, warns Foot

MR. FOOT said it had been said by some newspapers that the debate Parliament had had in the last days had been boring. "Maybe some of the people who said that in the newspapers had not actually listened in to the debate. Perhaps they had taken it on lobby terms."

Mr. Rippon's speech seemed to suggest that everything was now plain sailing on the subject of New Zealand, and that all the other issues that had figured most prominently in the negotiations.

"I wonder whether the Government has stopped to ask itself why, if in fact these negotiations have gone so well, the British people have been so little persuaded?"

"Is it because the British people are stupid? We cannot say that, can we? I believe that the British people are perfectly capable of making up their own minds on this subject."

"Of course, they look and see what is said by their political leaders. But I do believe that they have their own judgment in these matters. It is wise for MPs to respect that judgment and to respect the processes by which they have reached it."

He suggested the reason the public had not accepted the view of the Opposition was partly because Government MPs had not sought to present the argument in its fullest merits.

The Government should try to present its case on its merits rather than to say that someone on the Opposition side of the House might have changed his mind. There were many Government MPs opposite who had changed their minds, including Mr. Peter Walker (the Environment Secretary), and they were perfectly entitled to do so.

Mr. Foot said he was concerned about the views expressed by the British people and their rights in this matter and there was long Tory laughter after a Conservative MP shouted "Why do you need a Whip then?"

Dealing with arguments for entry Mr. Foot said it appeared to be curious to argue first of all that the main reason for going in was because great decisions were going to be taken in Europe, and at the same time to argue that our entry into Europe was not going to involve any erosion of essential sovereignty.

Mr. Rippon had said that Britain should not fear any erosion of essential sovereignty because of the system which operated in the Common Market.

Mr. Foot said: "Policy is made under the Treaty of Rome in Europe by the tug of different interests between different nations and the question may not be whether the majority is a feeling of impotent fatalism among the British people, which is highly dangerous."

Mr. Heath said not long ago that he wanted to do the same thing as the Community, to be only with the full-hearted consent of the British Parliament and people.

"It may well be in future, if we enter, that we shall have to accept a whole series of decisions which we dislike for fear that another nation will threaten to destroy the Community if we do not accept them. This is what I believe to be a possibility. This is what has already happened."

"It was precisely by this method that the Common Agricultural Policy was decided; it was never part of the Treaty of Rome."

The House of Commons and the British people would have less power to protest against value added tax than John Hampden had to protest about ship money.

We do believe that if we go into Europe on the terms arranged there will be some derogation from the sovereignty of this House in such matters as taxation, coal, steel and regional policy."

Lord Gladwyn, in an article in the Times had said that for the EEC to be democratic there would ultimately have to be a European Parliament. But in the meantime those great decisions were going to be taken by undemocratic bodies.

The country knew that food prices were going to rise if Britain joined the EEC. "Every time the Prime Minister says there is not going to be much of an increase, everyone is the more certain that they are going through the roof."

"The end of the era of cheap food is not a small incident in British history, even if the leader of the Liberal Party is not prepared to shed a single tear over the tomb of British democracy."

The erosion of sovereignty due to accession to the EEC would be real. It would have been much wiser to seek some other way of gaining the advantages of entry or association, said Mr. Foot.

He said he did not wish to give the impression that national sovereignty was an end in itself. "I do believe, however, that when we make our derogations from our national sovereignty we should be very particular where that sovereignty is going to be transferred to."

Mr. Foot said it would be very unwise for this country to relinquish the responsibilities of the House of Commons because our people looked to it as the body directly responsible for their living standards, their level of employment and the control of their livelihoods.

He criticised public opinion polls. First they said that the majority of British people were opposed to entry but in the next breath they expressed the belief that it was inevitable that we were going in.

"That seems to me to show stand up and be counted."

No mandate

"The people got lopped off that for some fairly early on. It was the Parliament was concerned 'half-hearted' had now become 'half-hearted' they were now dealing with just the 'consent of Parliament'."

It was not a matter of confidence, apparently. "Nothing like that. Such indecent language never passed the lips of the Patronage Secretary (Mr. Pym, the Government Chief Whip). Whatever may have been hurried out by some big mouth at the Treasury, but the remainder of his sentence was lost in uproar."

Where is the Prime Minister going now? Into what Parliamentary shambles and shambles of shambles is he steering now? The most daring display of seamanship since the wreck of the *Hesperus*?"

Now it all rested with the Patronage Secretary and whether he would be able to carry the bloody instruments of the guillotine and the closure.

Mr. Heath and his Government had no mandate, no authority from the people, to carry the enabling legislation through the House. If he wanted this authority he could have tried to get it at the last election.

If it is a historic measure, then it ought to be taken in a historic manner.

Mr. Jeremy Thorpe intervened: "You went to the election in 1970 as a member of a party that had an application on the table to join Europe."

"In what part of the Labour Party's manifesto or in what speech made by any member of the Cabinet of that Government was it made clear that when the terms were known they would first be subject to a general election?"

Mr. Foot said: "That is the difference between my situation and that of many Members of this House. And when I stand here and say I am opposed to entry into the Common Market I am saying exactly what I said at the election."

Mr. Foot said Mr. Heath should pluck up his courage to face a free vote of the people "for that, in the end, is the only vote worth having."

Mr. Philip Goodhart (C. Beckenham) said the point which had convinced him in favour of entry was that over the years Britain's power to influence the world would inevitably decline if we stayed outside, while the EEC's power to influence our decisions would increase.

Mr. Charles Pannell (Lab. Leeds W.) said he had always wanted Britain to go into the Common Market. "I shall not abstain—it is time for men to stand up and be counted."

Shots from de women's car

LORD BALNIEL, Minister of State, Defence, describing to the House the incident in which two women were shot dead in the Lower Falls area of Belfast early on Saturday said that the car in which they were travelling was "broken from inside."

"Two shots were fired from inside the car towards soldiers in Cape Street. Three soldiers returned a total of nine rounds."

Once the crowd had been dispersed from around the car, the two women, Mrs. Mary Meehan, 30, mother of four, of Bantry Street, and her sister, Miss Dorothy Maguire, 19, of Westrock Road, were found shot dead in the back seat.

Mr. Jock Stallard (Lah. St. Pancras N.) said: "Earlier reports of this incident over the official media, television and radio and so on, attributed the shooting to a group of young women who were dressed in gaily-coloured blouses."

"They were dressed as many thousands of young women would dress in this country for an ordinary evening out."

"Statements made from the same scene of this tragic incident show quite clearly that no shots were fired from the van. In view of this will you initiate an immediate and comprehensive inquiry into the incident?"

Lord Balniel said: "There has, of course, been an inquiry by the Special Investigation Branch of the Royal Military Police, and the military police will be made available to police if they require it."

"I understand that one was wearing a jacket and the other a jacket and trousers. I know this is a detail which has been argued in the report, but it is really irrelevant matters that need to be reported. The reason for the returning is that there was no change in the rules available to the troops."

Civil law

Mr. George Thompson asked if Lord Balniel to "urge Lord Balniel to 'new more positively and declare there will be the fullest possible inquiry into the facts' in view of the apparent conflict of evidence."

Lord Balniel replied that he had already been an inquiry into the facts, and that a report would be made available to the public. The matter would be before the courts in Northern Ireland.

Mr. Thompson asked if there had been any change in the rules given to the Army or if they might or might not have been any truth in the allegation that there was an instruction to fire on suspicion."

Lord Balniel said there had been no change in the rules available to the troops.

Bolton report

MR. JOHN DAVIES, Secretary for Trade and Industry, said he expected to publish the report of the Bolton committee, investigating into the problems of businesses, on November 1.

Regional planning changes

By Richard Evans, Lobby Correspondent

A comprehensive reorganisation of the headquarters planning group and the regional offices of the Department of the Environment is to be inaugurated next month to ensure that the Government machine is capable of implementing environmental policies.

The new arrangements cover all aspects of environmental planning in both town and country, including regional planning and development and land-use and transportation policies on the local, regional and national scale.

One result will be to decentralise much of the planning work to regional offices in 1977.

Regional offices will each be headed by an under-secretary known as the regional director, who will also be chairman of the local regional economic planning Board, which provides information and advice to the regional economic planning councils.

Within each region office work will be organised into three main groups of transportation, planning and housing. The new arrangements will take effect on November 1.

The Environment Secretary, Mr. Peter Walker, said yesterday that the new structure would enable the Government to take a more comprehensive view of the development of the regions, and it would have a major impact on the Government's regional policies.

Labour MPs seek UCS assurances

BY OUR PARLIAMENTARY CORRESPONDENT

LABOUR MPs tried to get a hulk carriers and a British firm assurance from Mr. John Davies, Secretary for Trade and Industry, that the Government meant to preserve employment in all four yards of the former Upper Clyde Shipbuilders.

That was the indication he had given last week. Opposition MPs maintained when they pressed Mr. Davies at Question-time on progress made towards clearing up the situation since the Minister's statement on October 20 on his negotiations.

Mr. Davies, however, insisted that his questioners would have some difficulty in showing that such an undertaking—to move towards employment in all four yards—had been given.

During these exchanges, Mr. Davies assured MPs that the Government was fully prepared to give guarantees for the completion of ships by Govan Shipbuilders. But there were certain "formalities" to be resolved with Irish Shipping first, and the Minister insisted that he would add nothing to the statement he had made in the Commons last week.

Andrew Marrgrave writes: Mr. Robert C. Smith, the UCS Liquidator, has gone ahead with the re-arrangement of the Government's regional policies.

Formal issues

"I don't remember making such a statement," the Minister said, and then added: "Of course it will entirely depend on Govan Shipbuilders being able to do the job. It is a matter of fact, not of opinion, which will command respect in terms of its future viability."

During these exchanges, Mr. Davies assured MPs that the Government was fully prepared to give guarantees for the completion of ships by Govan Shipbuilders. But there were certain "formalities" to be resolved with Irish Shipping first, and the Minister insisted that he would add nothing to the statement he had made in the Commons last week.

Andrew Marrgrave writes: Mr. Robert C. Smith, the UCS Liquidator, has gone ahead with the re-arrangement of the Government's regional policies.

Fighting fund

UCS shop stewards intend to call a mass meeting of all workers of Scotland shop stewards next week to fight compulsory liquidation and presumably to raise additional funds to keep the "ship" going.

So far about 1,100 people have left UCS since liquidation, about 850 of them by redundancy, and the rest voluntarily. About half of them have been rehired in new jobs, mostly in the four Irish shipping yards from the UCS fighting fund.

Davies reconciles car industry jobless with rising demand

BY JUSTIN LONG, PARLIAMENTARY CORRESPONDENT

THE paradoxical situation of both expansion and rising unemployment in the motor car industry was explained by Mr. John Davies, Minister for Trade and Industry, in the Commons yesterday as a situation prior to a "boom in consumption."

Mr. Davies said that, in August and September, taken together, some 36 per cent. above corresponding figures for last year, and compared with an increase of 8 per cent. in the period January to July, August car exports were nearly 10 per cent. up on August 1970.

From the Tory benches, Sir Gerald Nabarro asked at question-time if the Minister could explain how it was that continuous expansion in the industry had not yet succeeded in halting the increase in unemployment in all the principal motor manufacturing areas.

Mr. Davies suggested that it was common ground that rising consumption brought about an increase in manufacturing industry only with some time lag.

"And at the outset of any boom in consumption, the first element which is drawn on is existing stock," the Minister went on. "So the effect on unemployment is always normally delayed."

Encouraging prospects for manufacturing industry were also seen by Mr. Anthony Grant, Parliamentary Under-Secretary for Trade and Industry, when he replied to Tory anxieties that Senator Kennedy's next speech should concentrate on the "iniquities"

No privilege breach in Lyalin case

THE MANNER in which the Attorney General had dealt with certain questions involving the decision not to proceed with a drunken driving charge against the Russian defector Oleg Lyalin did not involve a breach of privilege, the Speaker ruled.

Mr. Arthur Lewis (Lab. West Ham N) had complained that a statement attributed to Mr. T. C. Hetherington, legal secretary to the Attorney General, appeared in the Daily Telegraph and was in effect, answers to questions Mr. Lewis had put to the Attorney General for answer on the following Monday about the Lyalin drink and driving case.

The Speaker told the Commons that he had carefully considered material submitted to him and whether the matter fell within the ambit of privilege. "I now rule that privilege is not involved," he said.

In a written reply, Sir Peter Rawlinson, the Attorney General, rejected a suggestion that he should prosecute Mr. Lyalin for spying.

Mr. Lewis had asked whether "in view of the evidence against Lyalin and the self-confession of spying" made by Mr. Lyalin, Sir Peter intended to prosecute him.

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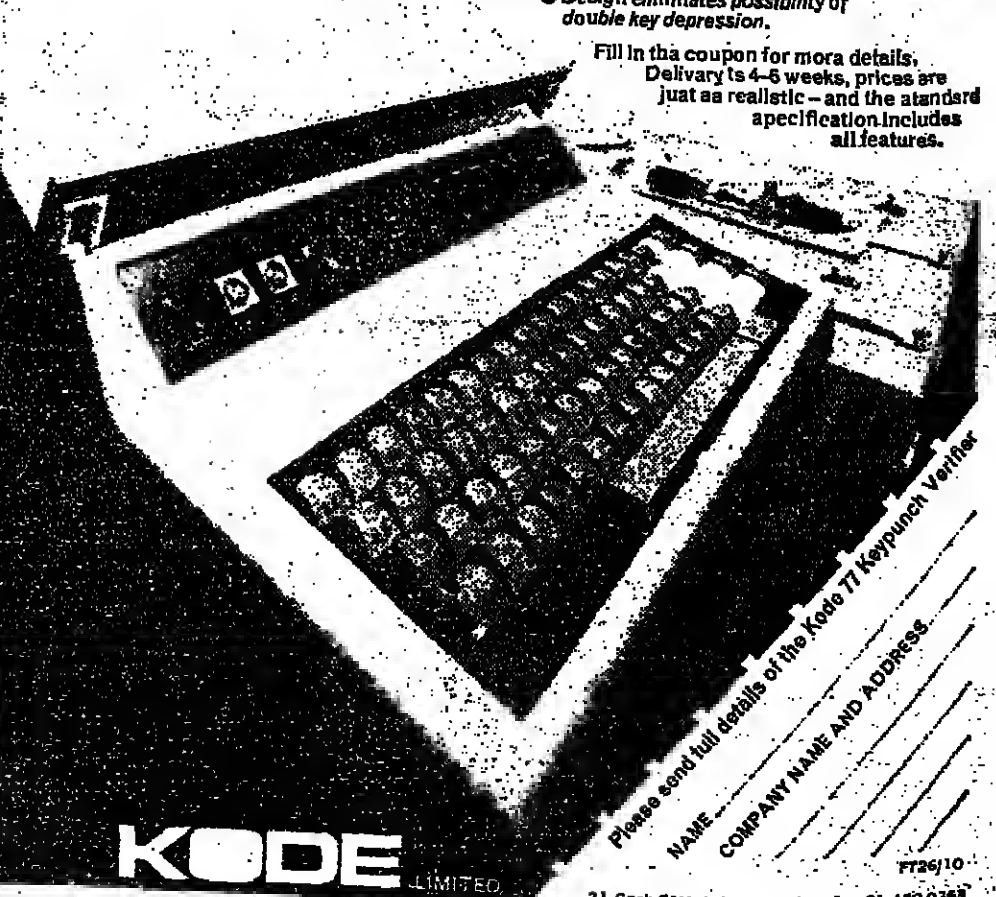
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overseas news

are illing talk abral

idget Bloom, a Correspondent

AFRICAN nationalists in the West coast of Africa, like to stop fighting and end to the war, in Cabral, leader of the independence Party, said yesterday. A con- of such negotiations, er, would be "that we accept the continuation of rule in Guinea or the Verde Islands." Mr. Verde, who is on his third in London since fighting in Guinea nine years ago, but the PAIGC (Party for independence of Guinea and Cape Verde) now controlled the country. Mr. Verde administered the area controlled, running schools, and clinics and would establish local assemblies to local political partici- past year had seen "a higher level" of fighting in previous years, and fighters had attacked the capital. The Guinea armed forces High- with 30,000 troops in territory, knew that they not win back lost territory, ver, they would not give up to lose Guinea would also lose Angola and Mozam- which were much richer es, Cabral said. al said that he had had about a possible peace- meet with the Portuguese could continue fighting until Portuguese were ready to Guinea could count on help other African states. Cabral added, was ing the PAIGC with one and everybody knew when Gen. Gown said re- that one of the Portuguese nes would be liberated in years, he was speaking of al is spending a week in in ad will be seeing Labour leaders, including the w. Foreign Secretary, Mr. us Healey. However, a re- to meet Lord Lothian, the gn Office Minister respon- for Africa, had been re-

Egypt prepares campaign to mobilise opinion

BY OUR OWN CORRESPONDENT BEIRUT, Oct. 25.

THERE ARE signs of an Egyptian-led campaign to mobilise the Arab world psychologically for the end-of-the-year deadline set by President Anwar Sadat.

Cairo to-day let it be known that a decision on whether Egypt will resume hostilities with Israel will be taken at the end of the year, the end of the Islamic Holy Month of Ramadan, which ends on November 18.

The announcement was made by Mohammed Abdel Salam al Zayyat, Secretary General of the Central Committee of Egypt's State-controlled political organisation, the Arab Social Union (ASU).

Mr. Zayyat was commenting on a state last night by Mr. Sadat that the "day is very day" when the Egyptian people and we with them, will take the conclusive decision which will affect our destiny and that of the generations to come.

The President spoke in a message on the occasion of the first meeting by the newly-established local committees in the districts which aim at ensuring a measure of decentralisation of the Administration.

Radio Cairo, in highlighting Mr. Sadat's message and Mr. Zayyat's comment, said the emphasis by Egyptian leaders is on the "nearness" of the decision on the battle with Israel. The radio made it a point to recall that 24 hours previously, Lt. Gen. Mohamed Ahmed Sadek, the Commander-in-Chief, declared during a visit to the Suez front that the battle with Israel "is closer than many people think".

A leading newspaper here to-day, Al Hayat, reported that President Sadat has turned down an appeal by Yugoslav President Tito for an extension of the deadline for a decision on the Suez front.

The most educated opinion here is that the Cairo drive is primarily for mounting enough pressure to make Israel's position more flexible on political settlement. At the same time President Sadat wants Egypt and the Arab world at large to be ready if hostilities are resumed by next January.

Our Cairo Correspondent adds: The prosecution to-day demanded the death sentence against General Mohamed Fawzy, Egypt's former War Minister, when he went on trial before a revolutionary tribunal presided by three military judges. He pleaded not guilty to charges of treason in conspiring to overthrow the regime of President Anwar Sadat last May.

New Israeli bank chief favours spending cuts

BY OUR OWN CORRESPONDENT JERUSALEM, Oct. 25.

IN his first policy statement since the announcement of his appointment as Governor of the Bank of Israel (to succeed veteran David Horowitz) Mr. Moshe Sandberg, to-day came out strongly in favour of a cut-back in the expenditure of all Government departments including the Ministry of Defence.

Such cutbacks are essential to prevent deficit financing in 1972-1973, he declared.

According to Press reports the Finance Minister, Mr. Pinhas Sapir estimates expectable income in 1972-73 at the equivalent of £1,500m. whereas the budget submitted for approval by the various ministries aggregated £2,000m. If the next budget is not balanced it will result in runaway inflation, Mr. Sandberg warned.

Speaking on the occasion of leaving his current job of special adviser to the Minister of Finance, Mr. Sandberg highlighted a number of outstanding features in the Israeli economy - including the shortage of workers which he estimated at 22,000. (A proposal was put forward this week to mobilise high school children for ten days citrus picking during the height of this winter's season since it is felt that drawing a very substantial additional number of workers from the occupied areas for this task would disrupt the economic life and development of the areas.)

Mr. Sandberg also called for intensification of local production for the defence establishment since the expansion of these industries would not only save foreign exchange and reduce dependence on imports but would also stimulate further development in the metal working, optical and electronics industry which are beginning to make a very substantial contribution to exports in both military and civilian life. Meanwhile the Knesset (Parliament) here to-day formally honoured Israel's elder statesman David Ben Gurion on the occasion of his 85th birthday.

TANZANIA WARNS UGANDA AGAINST BORDER ATTACK

DAR ES SALAAM, Oct. 25.

TANZANIA to-day accused Uganda of trying to annex part of its territory and warned that its forces would hit hard against any attack over their common border.

Latest threats by the Ugandan military regime showed it no longer recognised this international border, Mr. Jacob Nampuna, Tanzanian Information Minister, said.

Yahya Khan appeals to U Thant

By Our Own Correspondent KARACHI, Oct. 25.

PRESIDENT Yahya Khan has urged the United Nations Secretary-General U Thant to pay an immediate visit to India and Pakistan to discuss withdrawal of troops from country borders.

President Yahya also suggested that United Nations observers should be posted on both sides of the border to supervise such a withdrawal and maintain the peace.

His proposals were contained in a letter sent on October 21, the text of which was officially released to-day in reply to U Thant's offer of the United Nations good offices for the restoration of peace in the sub-continent.

President Yahya recommended the withdrawal of armed forces and artillery along all frontiers between India and Pakistan on both East and West to at least an agreed safe distance and perhaps even to peace-line stations. At the same time he said that India was shelling Pakistan and this must stop.

President Yahya said a public statement by U Thant that he intended to visit India and Pakistan would be most desirable. A state of virtual war between Pakistan and India had been in existence "since March 1," the President said.

The President emphasised the "gravity of the situation as confirmed by Indian leaders on October 19, threatening to occupy and hold the Pakistan border cities of Lahore and Sialkot (in West Pakistan)."

Pakistan to-day claimed that 76 persons were killed when a mixed force of Bengalis and Indian soldiers attacked Wymensingh on the north eastern border between India and East Pakistan. Several Indian soldiers and a large quantity of arms and ammunition were also captured, a military source claimed. The source also claimed that Indian artillery pounded the area.

Reuters reports from Bremen: The 9,565-ton West German freighter Falkenfels now in Bombay is carrying four chests of bunting weapons and ammunition consigned to East Pakistan, a spokesman for the Hansa Line said on Monday. The ship was reported from Bombay to have been prevented from sailing for Chittagong because Indian dock workers said it was carrying arms for the Pakistan Army.

The Hansa Line spokesman commented: "The bunting weapons are destined for private dealers in Chittagong. Nobody could make war with such arms."

GATT to hear plea for 'Japan Round' tariff cuts

BY OUR OWN CORRESPONDENT TOKYO, Oct. 25.

JAPAN hopes to win acceptance for a "Japan Round" of tariff reductions during the next meeting of the General Agreement on Tariffs and Trade (GATT) which is scheduled to open in Geneva on November 16, according to usually reliable sources here to-day.

The Japanese would like to propose a package arrangement among GATT members as a means of countering the dangers of a growing protectionism throughout the world as a result of President Nixon's dollar-defence programme. As the Japanese see it, the European Economic Community appears to be moving towards establishment of a regional bloc which would curtail trade with Japan.

With the U.S. taking a stand against the dramatic inflow of Japanese products and the West European countries protesting that they have no intention of allowing Japan to direct the resulting surplus to the EEC markets, Tokyo is beginning to panic.

It is becoming doubtful, however, that Japan's proposal will receive any encouragement, particularly since both the U.S. and the EEC countries are aware that the Japanese Ministry of International Trade and Industry and the Agriculture-Forestry Ministry are strongly opposed to further drastic reduction of tariffs on manufactured goods and farm products in the near future.

Stronger ties

Preliminary testing of the concept by Japan has revealed that the Western nations see the Japanese offer as merely another form of the "one-way street" which has disrupted markets in North America and Western Europe over the past decade.

Still, it may well be that Japan will try to push the "Japan Round" proposal. In the event, Japanese Government officials favour an across-the-board tariff reduction of between 10 and 25 per cent. after adjustment of the tariff rates created by the "Kennedy Round" package.

Behind Japan's thinking on the chances of a "Japan Round" is the concern that, by the time Britain enters the Common Market, the Japanese must have much stronger trade ties with the European Community.

A "Japan Round" would, if accepted, so a long way toward prevention of regionalism in the world economy. It might also be a good way of circumventing the one major hurdle which has yet to be surmounted in increasing trade between Japan and the EEC countries.

Japanese trade with the EEC last year amounted to only about \$2,300m. both ways. Only a meagre 6 per cent. of Japan's total volume of trade was with the Common Market nations and the EEC received less than 3 per cent. of its imports from Japan.

Hong Kong SE row looms

BY OUR OWN CORRESPONDENT Hong Kong, Oct. 25.

A MAJOR row could arise soon in Hong Kong over the nature of a "Watchdog" body to regulate the Colony's stock exchanges, establishment of which has been proposed by the Company Law Revision committee.

The committee last month presented its first comprehensive report on company law reform to the Government. One of its principal recommendations was that an Advisory Board should be set up to establish ground rules for the stock exchanges.

It recommended a compensation fund, clearcut rules for the registration and qualification of brokers and the standardisation of working hours and fees. It did not, however, elaborate on the form which the board should take. It is understood that the question of the Advisory Board will not figure prominently in the current series of meetings of the Company Law committee. Apparently, the committee feels that the onus now lies with the Government to take the necessary steps to control the exchanges.

Many market observers here are concerned that if the number of exchanges and inexperienced brokers is allowed to proliferate, the opportunities for malpractice will increase. There are only the most rudimentary rules regarding the qualifications of brokers at present.

The point has now been reached where market capitalisation of quoted companies is approaching HK\$5,000m. and turnover on a single day on all three exchanges has topped HK\$200m.

Essentially, the issue turns on whether, given the friction between the two leading exchanges, they will be able to put their own houses in order or whether the Government will be forced to

Uganda cotton sold at higher prices

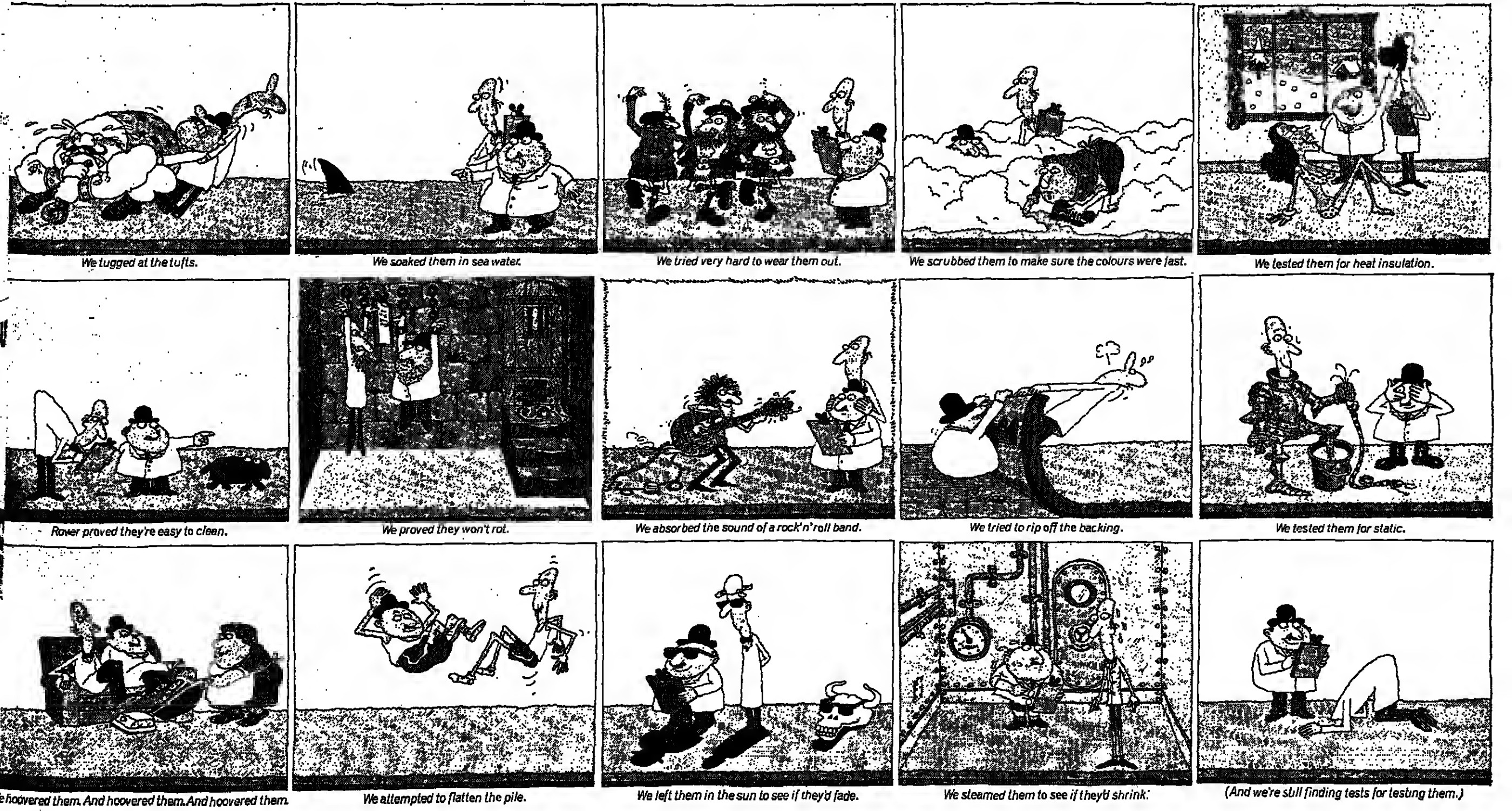
By Our Own Correspondent KAMPALA, Oct. 25.

UGANDA'S Lin Marketing Board completed its current forward auction programme to-day, ward auction programme last week having sold over 105,000 bales of cotton—from the new crop which will be available for shipment from November onwards.

Prices have risen steeply over the six auctions and at last week's sale the reserves were up to 12 cents per kilogram above those of the previous sale two weeks ago. Satu variety was sold at 552 cents free on rail, and the longer staple BPA variety was quoted against reserves ranging up to 605 cents.

As well, 5,006 bales of low-grade BR cotton was sold at the high level of 400 to 405 cents. No further auctions are yet scheduled, but the Board is expected to reopen sales soon.

The Uganda Government has announced that cotton growers will receive one shilling 25 cents per kilo for raw seed cotton, an increase of five cents over last season, to encourage maximum production.



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The Technical Page

EDITED BY ARTHUR BENNETT AND TED SCHOETERS

RESEARCH

Simple Rankine engine

PATENTS covering a new design of Rankine engine, of considerably simplified layout but still offering the low pollution characteristics of the class, have been granted to Dr. William Doerner, a research engineer of the Du Pont company by the U.S. Patent Office. The company has patented the design in most countries.

Rankine cycle engines use external combustion to heat a fluid which then expands to drive the engine. Laboratory tests at the company's central research department in Wilmington, Delaware, on a 20 hp engine have shown that several problems relating to size and complexity in the design of this kind of engine have been solved by the work carried out by Dr. Doerner.

Significant features of the new design include a cylindrical boiler and air condenser which rotate as a unit at a controlled speed. A turbine internal to these is driven in the contrary direction by a vapourised organic fluid under pressure.

The rotation of the condenser-boiler unit provides efficient heat

exchanges in both sections. It ensures that fluid in an annular chamber is boiled by an external burner while it is held to the outer surface of the chamber by centrifugal force. Speed of rotation is 2,500 r.p.m.

The vapour from the fluid is forced out of the annulus and taken to a nozzle ring to drive the internal turbine which spins at 27,500 r.p.m.—in turn operating a drive shaft to the external load. Once the work has been done, the vapour condenses and the liquid which results is forced back to the ring-shaped boiler.

No external blower is needed to force air over the condenser and as a result the engine is quite and demands little power for this action of its operation. Elimination of a separate pump for the return of condensate to the boiler is a big factor in reducing internal power consumption and simplifying the design of the engine.

Dupont built the laboratory engine to demonstrate the new approach and does not intend to go into manufacture itself. The company is seeking licensees and

in view of the prevailing anti-pollution climate in the U.S. there seems to be little doubt that such clients will be found.

External combustion engines are at the focus of attention at the moment because they can be made to burn a variety of fuels and thus can become minor sources of pollution.

Dupont studies have shown that its design could easily be up-rated to 200 h.p. at the least and in this form—apart from static engine-generator sets, it could power marine engines, and fork-lift trucks.

Laser tests pollution

TAKING advantage of the fact that polluting materials in the air absorb laser energy, it is now possible to measure pollution as small as 10 parts per 1,000m.

The method gives an immediate reading of the amount of all the common pollutants except sulphur dioxide. It is equally

effective on carbon monoxide and hydrocarbons from petrol engines, and the nitric oxides and dioxide from industrial chimneys.

The laser, in the method developed by the Bell Laboratories, Holmdel, N.J., U.S., is tuned to a specific frequency by changing the magnetic field in which it works. Its beam is led through an opto-acoustic absorption cell containing the air sample. The beam is tuned to the specific frequency of the pollutant for which the test is being made.

Any of this pollutant in the sample absorbs energy from the beam. This absorbed energy results in an increase in temperature and pressure in the absorption cell, and the increase is read by a transducer in the cell which generates an electrical signal. The increase and thus the strength of the signal are directly proportional to the amount of polluting material present.

A typical absorption frequency is that for nitric oxide, which takes in energy if the laser is radiating waves of five to six microns length. No other pollutant will absorb energy of this frequency.



COMPUTERS

Burroughs a winner in Scotland

FIVE towns belonging to the new towns group of Cumbernauld, East Kilbride, Glenrothes, Irvine and Livingston have clubbed together to buy firm. worth of computing equipment from Burroughs to be shared by the participants.

It is intended to use as the central machine a B3500 and to have, in each centre in the five towns, a TC500 intelligent terminal linked to the central unit over private Post Office lines. This is a significant move into the shared facility area and though it is not the first, the fact that the five areas are so to speak on an equal footing is extremely interesting.

All the terminal units will have access, through the big machine, to a very large file of central information. The B3500 will start off with 90,000 bytes of core and 40m. bytes of main memory in disc files and its data base will be geared to storing information on every aspect of the establishment and development of these new towns.

Access to this information will take a matter of seconds and the data will be used in such work as highway planning, landscaping, architectural design and in general administration.

The terminals will be used for financial and administrative enquiries in real-time as well as for the direct input of data to file and replies from the central unit. But architects and engineers also will be able to use the central machine direct from terminals in their own offices, these being of the teletypewriter design.

Another snippet of news from Burroughs, this time in the U.S., will bring good cheer to the hearts of the banking sector sales force in Britain. It is that the Federal Reserve Bank of New York, largest of the 12 U.S. Government FRB's, has ordered a B4700 data processing system like Barclays and Midland banks in Britain. The New York branch is to use the equipment for research and statistics, handling an enormous flow of regular reports.

Finds the best route

SOLUTIONS of problems in depot-scheduling, fleet planning, vehicle scheduling, amenities location and town planning, are critically dependent on the accuracy of measurements of time and distance.

A new package from M. J. Bevan of Bancroft Court, Hitchin, called "Roadnet", provides this information. This is a suite containing a database of all significant road linkages in the British Isles. These roads are classified into seven jurisdictions to enable differentiation between travel speeds. The suite will produce from this database the minimum travel times and mileage between any pair of points in a set of origins and destinations.

To do this it needs only the National Grid reference coordinates of those points, and the speed for each jurisdiction of road that may be used in the trips intended.

The updating program is supplied for processing revisions and also for enabling clients to create temporarily amended road networks for special applications. Some examples are the deletion of all links with bridges of clearance less than a given height, or of any road on the creation of proposed motorway extensions to evaluate their effect on a given problem.

Philosophy behind the system is that all parts of an area that are not actually roads are barriers to a roadbound vehicle. So the designers see more sense in coding all roads rather than a bare minimum of barriers and, of course, the cost of computation falls considerably.

Logs one hundred channels

AN event logger that can scan each of 100 channels 1,000 times a second at relatively low cost has been out on the market by Sturges Automation of Lifford Lane, Birmingham B30 3JP.

The main application for the machine, which is called Statalog, is expected to be in industrial control rooms and plants. It will record machine operation, cycle times, stoppages and idling time, giving an automatic log of plant utilization and efficiency. A 20 character-line per second printout identifies in plain language or clear abbreviations the time, the item of plant and the change that has occurred.

A change of state produces an audible and visible alarm and the scan is stopped. When the printout is completed the scan restarts automatically and the changed state is held in core storage until a further change occurs.

Any event that happens to occur during the printout is stored until the scan recommences. Printout format is also held in the core store and can be reprogrammed without wiring changes or expensive ancillary equipment.

Inputs to the alarm scanner can be from the plant direct or from analogue measurement signals through plug-in interface units.

The system can be supplied as a complete package mounted in a standard 19-inch rack cabinet 8 feet high and 2 feet deep or as separate printer, scanner, and clock units.

Fine control of machining tolerances to 0.13 mm were essential for the fabrication of this rain gauge, which is designed automatically to collect rainfall data, and may be left unattended for several months at meteorological stations. The unit is in two sections—base and collector funnel. The base contains the tipping bucket mechanism, timing clock and battery, and a tape recorder, giving readings suitable for automatic processing and analysis. The collector funnel is available in two sizes, 150 and 750 square centimetres. The design was tested in a wind tunnel to preclude splashing and to cause minimum disturbance to airflow across the collector mouth. The base and funnel are made in ICI's Perspex by D and J. Plastics (Croydon), and the gauge is made by The Plessey Company.

ELECTRONICS

Brighter flying spot scanner

THE ability to scan negative colour film in TV telecine operations and reduced setting up time of colour film scanners in general are advantages claimed for a newly introduced high brightness CRT for flying spot scanning from EMI Electronics, Hayes, Middlesex.

The tube, called the MX89, employs a new phosphor of extremely fine texture (two to five microns grain size) settled by a special process to avoid clumping, giving a screen with negligible noise.

The brightness is claimed to be nearly twice that of conventional zinc oxide tubes under focused conditions for equal current and voltage. It can, says EMI, give a very satisfactory performance at a reduced voltage with consequent reduction in X-radiation.

The phosphor is also claimed to have much less change of brightness with focus than zinc oxide and hence shading due to slight change of focus is minimized.

The tube has a diameter of 125 mm and has been developed specially for negative colour film in 35 mm and 16 mm film scanners.

ITT alloy plant on stream

ITT's plant at Harlow for producing high quality nickel-based alloys for the electrical and electronics industry is now in operation.

Unlike most plants of this kind, which use vacuum melting techniques, the Harlow process uses a recirculating hydrogen furnace. The powder from which the alloy is to be made is mixed with additives in a revolving drum and then formed into blocks. These are sintered at about 1,300 deg. C in a low pressure.

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INSTRUMENTS

Torsion is shown on the graph

A TORSION testing machine developed at Bristol Univ. is being marketed by Chas. Madan of Broadheath, A. Cham. under licence from National Research Development Corporation. It draws a graph of torque against twist while specimen is under load and this whole shear stress/strain relationship can be quickly and easily derived. There is great interest in the torsion test materials and the company already hold a number of type machines.

Shear stress/strain relationship of a ductile material, as steel, are more important to designers than the tensile relationship. How while there are many testing machines in general for routine factory testing, comparatively few are available for torsion testing machines, which the shear relationship derived, have normally only used in laboratories. The machine, invented by Prof. J. L. M. Morrison of Bristol University, is a considerable simplification of design, which reduces the time taken to carry out a torsion test and automates the torque/twist characteristic of a specimen plot the material under test.

An electric motor drives end of the specimen through gearbox. The other end of specimen is attached to a previously calibrated cylinder on which an electrical strain gauge is fixed. The strain gauge is connected to a pen recorder which records the torque on specimen and the gearbox shaft also drives the chart of recorder to provide the t signal.

In this way a graph of torque against twist is produced since the twist of the specimen in the elastic range is two orders of magnitude lower than in plastic range, the gearbox widely spaced ratios to allow this. Important practical values such as the limit of elasticity, yield stress, the ultimate stress and the twist at failure occur, are also recorded. The machine is easily crated and the stress/strain curve can readily be obtained a simple graphic method in the torque/twist curve.

FINISHING

Polishing aluminium

TRAVELLING polishing machine, for polishing aluminium architectural components, has been developed to replace standard reciprocating tables at will occupy only half the usual space.

The machine has a fixed table 25 feet long and will be used to polish long aluminium door and window sections prior to anodizing. The travelling polishing head and its self-contained dust extraction unit, is supported on trolley bases moving on a ground steel track, which extends 10 feet beyond the end of the work table.

Each trolley base is fitted with anti-crawling and anti-lift rollers and travel power is supplied at a 1 h.p. d.c. motor. A polishing head incorporating spring loaded fully flexible characteristics is fitted, driven at 15 h.p. ac motor and carries a 24 inch wide polishing wheel. The machine, built by Job Hawley and Co. (Engineering of Green Lane, Walsall, is controlled by a microprocessor.

By agreement between the Financial Times and the BSI, information from The Technical Page is available for use by the Corporation's External Service as source material for its own news broadcasts.

Looks for drop-outs

A MACHINE able to test data magnetic tapes at 180 inches per second for their recording capabilities has been put on the market by Computer Ancillaries, of Radix House, Central Trading Estate, Staines, Middlesex.

Called the model 300, it will "test" and "certify" tapes for 500, 800 or 1600 bits per inch data densities for seven or nine-track operation and across the whole width of the tape.

In operation the machine first removes any data on the tape, and then detects drop-out and edge damage errors in a single pass. Any detected errors are automatically rechecked up to twelve times to confirm their presence, after which they are classified as temporary or permanent.

The machine will count the number of errors it encounters when it is operating in its continuous test mode. In the "certify" mode it can be set to stop automatically and identify (after retrial) a permanent error.

Facilities are incorporated into the machine to clean the tape both before and during testing.

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SCIENTISTS' PAY

Academic world tops list

BY MICHAEL DIXON, EDUCATION CORRESPONDENT

ANYONE who thinks of academic scientists as dedicated but relatively poor scholars, is living in the past. It now seems that earnings levels are mainly highest in academic life not just for professionally qualified chemists—as disclosed in the Financial Times on October 16—but for scientists belonging to the five professional bodies which constitute the Council of Science and Technology Institutes.

This year the Institute of Biology, the Institute of Mathematics and its Applications, the Institute of Physics, the Institution of Metallurgists, and the Royal Institute of Chemistry all surveyed the earnings of members working in various jobs in different sectors. More than 30,000 professional scientists gave information representing nearly two-thirds of the total membership.

The combined results, previously unpublished, show that in general the academic world takes the cake. The chart with this article, for instance, traces the median earnings as at January 1, 1971, of the five bodies' "associate" members—the highest level of membership awarded primarily for examination results.

Middle man

The chart therefore reflects the total earned incomes, from all sources, of people with similar professional qualifications, but employed in different ways of working. The "middle" figure represents the earnings of an academic career.

For example, the group of 46-50-year-olds working in universities is made up of the associate-level members of all five bodies who fit this description, whether they are professors or lecturers. Of these, half earn more than the median of £4,050, and half earn less.

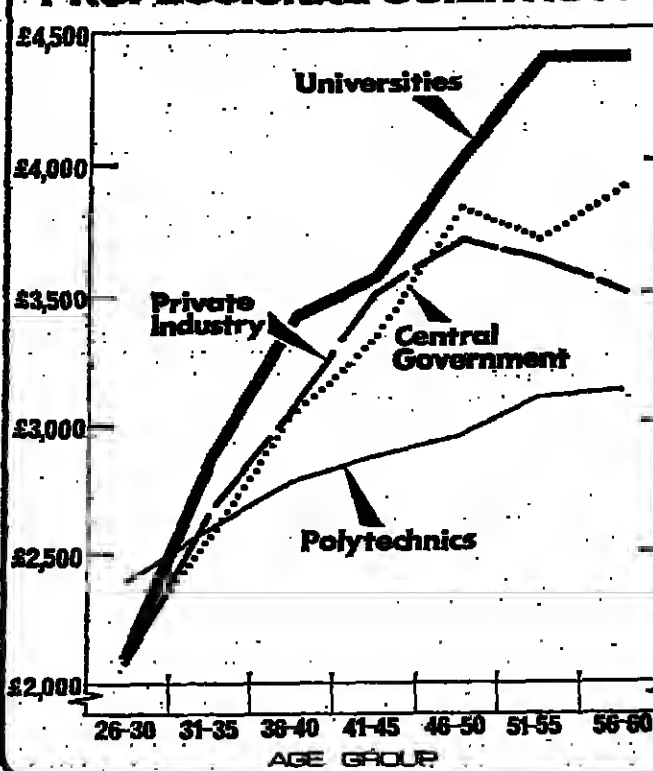
The total earnings of the "middle associate-level scientist" in university work exceed those of his similarly qualified counterpart elsewhere from the age of 31 onwards. The official salary scales for academics do not seem unduly generous. They run from about £1,500 to around £3,400 for lecturers, to a maximum of about £4,400 for senior lecturers and readers, and to an average of around £5,800 for professors.

So the immediately apparent explanation for the "middle" academic professional scientists' lead is that they are able to do external work, such as consultancy—particularly in the long vacations, which, together with other sources of income, are the outstanding fringe benefits of an academic career.

However, the fact that the university median continues to gain after the age of 45, when the others level off, probably has another explanation. Often academic scientists who have not previously joined their professional body do so when they approach professional rank, which gives a high-income bias to the university medians in the older age groups.

The widely held belief that a professional scientist who enters industry instead of taking a university post is bound to earn more money, is definitely refuted by these figures. True, the scientist who gets to the top in industry will earn more than the top academics. To do this, however, the industrial man—unlike his counterparts in universities—would have to cease being primarily a scientist.

MEDIAN TOTAL EARNINGS OF PROFESSIONAL SCIENTISTS



ings here are £2,940 at 36-40; £3,490 at 36-40; £4,000 at 41-45; £4,280 at 46-50; £4,350 at 51-55; and £4,800 at 56-60. The median for similarly qualified people managing other forms of scientific and technical work is lower—£2,660 at 31-35; £3,000 at 36-40; £3,450 at 41-45; £3,800 at 46-50; £3,760 at 51-55; and £4,150 at 56-60.

The figures for the workers are much the same as those employed in research and development departments, those doing other scientific and technical jobs. The professional research chemists' median earnings are £2,500 at 31-35; £2,820 at 36-40; £3,150 at 41-45; £3,460 at 46-50; £3,370 at 51-55; and £3,180 at 56-60. The comparison figures for the "other" workers are £2,640; £2,820; £3,240; £3,630; and £3,880.

Industrial companies have a back on research activity and have few jobs available for young science specialists. If companies want to fill the jobs with the academically brightest science graduates, earnings levels shown here are a definite obstacle to industrial recruitment plans.

Top honours graduates in university science courses usually all share the same job—to spend their working life doing scientific research. Such people the message of earnings surveys is clear: accept any offer of a further course of education that could lead to a university career in science.

Public sector

Failing that, the next earnings prospects—a good lower—are in the public sector. There the median figures for a professional chemist doing research work are £2,550 at 31-35; £2,850 at 36-40; £3,290 at 41-45; £3,900 at 46-50; £3,320 at 51-55; and £4,000 at 56-60.

Below the public sector come private industry. However, even on the bench research work in commercial companies seem to offer professional scientists better earnings prospects than does teaching in the polytechnics. It is hard to understand, therefore, how the Government expects the polytechnics to become the equal of the universities in public esteem, especially since last week's pay rise for polytechnic lecturers still leaves their salary scales well behind those of university lecturers.

Research work

The RIC's statistics show an impressively high median for the professional chemist who has gone into general management. The "middle man" in this category is earning £3,170 at 31-35 years old; £4,010 at 36-40; £4,950 at 41-45; £5,310 at 46-50; and £5,155; and £5,000 at 56-60.

Next highest in the industrial ranking is the professional who manages research and development work. The median earn-

Dirty restaurants closure urged

DIRTY RESTAURANTS should be closed rather than fined up to £100 as at present, says a medical officer of health. Dr. Joseph Briscoe-Smith, MOH for the City of Westminster, says in his annual report: "The closure of a highly profitable restaurant would be more salutary than the present maximum fine of £100 under food hygiene regulations which could, in some instances, mean little more than a slight drop in profits... due to a wet weekend."

He says food is prepared at some catering premises in Westminster "in conditions which leave much to be desired."

"The satisfactory premises tend to be merged with those that are not, and this results in a picture of many unhygienic and unsatisfactory premises being used for the preparation and sale of food."

This was the situation despite continuous efforts by the inspectorate to maintain acceptable conditions.

Dr. Briscoe-Smith blames much of the problem on those engaged in the day-to-day operation of the business. There are far more casual catering workers than the labour force of lower-paid and often casual catering worker can fill, he says.

Lower standards

"It follows that a dissatisfied worker will move elsewhere taking his attitude to his daily task with him, with the outcome that at the new premises his lower standard will continue to prevail. This situation is accentuated by the fact that many catering premises form part of vast impersonal complexes."

The MOH complains that under existing legislation a magistrate can disqualify a caterer for up to two years.

"But the caterer's wife, or any body else, may carry on the business under the same conditions which existed before disqualification."

Law Society backs move on compulsory purchase

THE LAW SOCIETY has joined the other professional bodies in criticising the unsatisfactory law on compulsory purchase for acquisition.

This is a problem which has existed for some time although it has been highlighted in the case of the houses at Hendon (North London) affected by the M1 extension, where no compensation was available to houseowners. It says in a memorandum published yesterday.

Blight

The society recommends an entirely new approach to the problem not only of compensation for compulsory acquisition but also for the effect of blight on property which is thought likely to be affected by compulsory acquisition but for which plans are not completely formulated. It recommends that in addition to receiving market value and compensation for disturbance, the dispossessed owner should receive a bonus.

Although the amount of compensation paid by local authorities would be greater, the society feels the amount saved in administrative costs of negotiations and, in particular, public inquiries, would largely offset any increase in compensation.

The society also wants to see compensation paid by public authorities which carry out operations on adjoining land which, in the case of a private owner, would constitute a nuisance but which, under the law as it now stands, give no right to a landowner who suffers.

Alternatively the landowner should have the right to make the public authority purchase his land.

Automatic

Owners of a house which is partially affected by compulsory acquisition, provided the house is within the rent act limits or is a single unit of occupation, should have an automatic and unqualified right to insist that their whole

property is purchased by the authority.

The society says that although the authorities' initial expenditure might be increased, the problem would be one of cash flow only.

Properties acquired would be available for resale when work was complete and the net cost would not be significantly greater than at present.

Events

To-day

PARLIAMENTARY BUSINESS—House of Commons: Fourth day of debate on the U.K. and the European Communities.

House of Lords: Town and Country Planning Bill. Commons amendments: first of three-day debate on British membership of the Common Market.

SOCIETY OF INVESTMENT ANALYSTS: meeting to be addressed by Mr. R. C. Cole, managing director, Waverley, at the Great Eastern Hotel, E.C. 4, 12.15 p.m.

COMPANY MEETINGS—AMALGAMATED ROADSTONE, 15, St. James's Place, W. 12.45. (Chairman, Mr. C. J. Mortimer.)

BROTHERHOOD (PETER), 21, Tottenham Court Road, W. 12. (Chairman, Mr. W. Gardner.)

CONSOLIDATED SALAK RUBBER ESTATES, 5, Queen Street, E.C. 4, 11. (Chairman, Mr. R. E. R. R. R.)

EAST ASIATIC RUBBER ESTATES, 21, Minerva Lane, E.C. 4, 12. (Chairman, Mr. H. T. Karlsen.)

PROSELYTIC, 21, Minerva Lane, E.C. 4, 12. (Chairman, Mr. W. C. Lane.)

PUNDALOVA, 13, Road Lane, E.C. 4, 12. (Chairman, Mr. C. H. Bole.)

ANAR TEXTILES, Hyde Park Hotel, S.W. 12. (Chairman, Mr. H. Edwards.)

SCOTTISH ENGLISH AND EUROPEAN TEXTILES, Essex Road, W.C. 2. (Chairman, Mr. H. M. Macdonald.)

STOCKLAKE HOLDINGS, Winchester House, E.C. 4, 12. (Chairman, Mr. C. K. K.)

WARNFORD INVESTMENTS, 28, Alderbury, E.C. 4, 12. (Chairman, Mr. S. S.)

WASTON, Nottingham, 12. (Chairman, Mr. J. Wood.)

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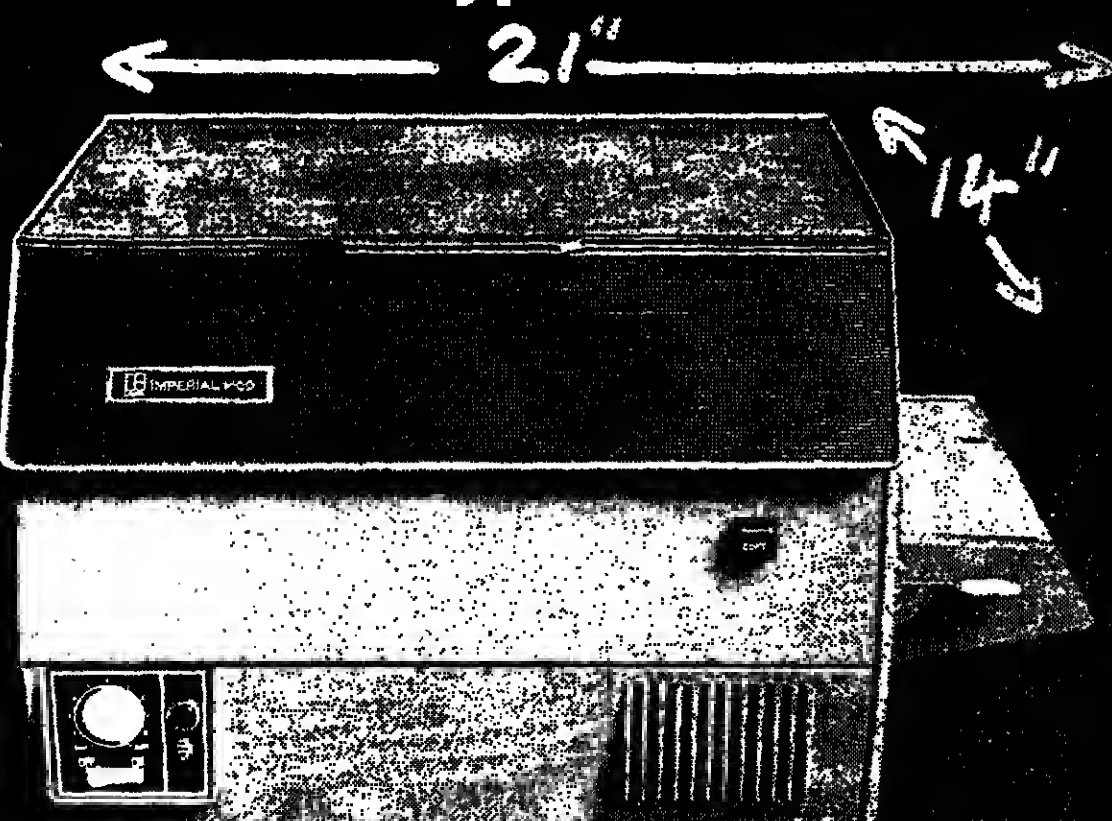
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ROAD HAULAGE

The Financial Times will publish a survey of Road Haulage on Thursday, November 4. The following indicates the proposed editorial content.

1. Introduction. Hauliers have been squeezed by rising costs, the trade recession, new legal standards imposed by the Government, and now fear of further cuts in drivers' hours if Britain joins the EEC. The industry's prospects—and its role in today's transport and distribution scene. Truck rental situation.
2. Licensing. The 1968 Transport Act made professionalism the basis of haulage licensing. How is the new system, and the blurring of the old distinction between private operation and public hire, working out? Has entry into the industry become too easy?
3. Common Market. Hauliers might have to face another upheaval in the licensing system, as well as further reduction in drivers' hours, if Britain joins the EEC. The present state of EEC transport policy—and the Brussels terms.
4. The Customer. A user's view of the service he expects from the haulier.
5. Vehicle Design. The Government has ruled against 44-ton lorries, and proposed new noise and smoke regulations. The effects on vehicle design, and the improvements the vehicle-makers are themselves planning.
6. The Men. Greater emphasis is now placed upon road safety and training enough drivers, mechanics, and managers to meet today's requirements? How is the testing and training system working out?
7. Security. The campaign to reduce hi-jackings has worked well. The lessons—and what more could be done?
8. International Operation. Despite the restrictive quotas imposed by France, Germany and Italy, haulage traffic across the Channel has grown fast. The prospects, and problems, of this specialised business.
9. Parcels. The three State-owned parcels carriers are losing money, and private competition is growing. The problem—and possible solutions.
10. Turn-round. 'Slow turn-round' at the port or factory is the bane of the haulier's life. What can be done?

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top Soviet grudge against U.K. could be long-lasting

MOIRA CUNYNGHAME

MOSCOW, Oct. 25.

SOVIET relations are bound to consider it politically motivated. The Soviet Union will do all it can to gain British support for a European conference, but it seems likely to vent its wrath in other ways, and highly unlikely that it will hasten to take any such steps. It is quite a long time since the Soviet Union has been so angry with Britain as it is now. The last time this was the case was in 1956, when the Russians felt that the British had betrayed them at the Suez Canal. Since then, the relationship has been a series of ups and downs, but the grudge has never been forgotten.

Nothing will be done to end the grudge, the conveying of the message that more British diplomats are leaving the Soviet Union, a fairly free hand. The main target for Soviet vengeance could be British exports to the Soviet Union. In the Soviet Union, the policy is to trade for trade, politics is a secondary consideration. It is well known that trade is used to boost political aims and vice-versa. It is said that a group of experts is now at work in the Ministry of Foreign Affairs, where the British Embassy is located, to work out a plan to increase trade with Britain to other countries, mostly West Germany and France. This would depend on the flexibility of the White Paper on pensions and the stress on the development of occupational schemes and the flexible way in which it is tackling the problem of the pensioners, said Mr. Rogers last night at the House of Commons. The discussion was opening the Government's pension proposals.

How actuaries see pension plan

BY ERIC SHORT

MOST encouraging aspects of the White Paper on pensions are the stress on the development of occupational schemes and the flexible way in which it is tackling the problem of the pensioners, said Mr. Rogers last night at the House of Commons. The discussion was opening the Government's pension proposals. It was said, a period of stability and consolidation in the pension system was needed to secure the healthy and rapid expansion that should be possible within the proposed framework.

implicity

If this was to be achieved, the proposed system must be acceptable, not only to those already in occupational schemes but also to those many millions who looked to the State for their retirement pensions. Mr. Rogers outlined the framework of the proposals and welcomed their simplicity compared with the plan from Richard Crossman, the former Labour Secretary for Social Services, which was based on the existing flat rate of contributions. The former was an unduly heavy burden on the lowest earners. While these proposals would appear to offer a satisfactory basis for the healthy expansion of occupational schemes, much would depend on the flexibility of the White Paper on pensions and the stress on the development of occupational schemes and the flexible way in which it is tackling the problem of the pensioners, said Mr. Rogers last night at the House of Commons. The discussion was opening the Government's pension proposals.

Pressure

Finally, there were the dangers of possible political pressures which could be brought to bear not only for providing benefit levels or reducing contribution rates beyond those actually acceptable, but also on the investment of the funds accumulated by the scheme. It was estimated that such funds would reach £5,000m. within 25 years. As such, he concluded it would be a powerful economic force, and control of it could be highly attractive to future Governments bent on pursuing particular social or economic ends.

HOME CONTRACTS

Services orders worth £3.4m. for Haden Young

Haden Young has won four contracts worth a total of £3.4m. The largest, at £1.9m., is for mechanical services at the new Central Hospital being built on a site of the Belfast City Council. Another large order is for mechanical and electrical services worth £1m. at the new Kingston Hilton Hotel in Mallow Park Avenue. Work on the Kensington site has already started and project completion is expected for spring 1973. The third contract, worth £60,000, is for the installation of mechanical and electrical services in a new office development in Glasgow for the Manufacturers' Insurance Company. Lastly, a company is to supply technical services to the Institute of Clinical Science for the Edinburgh Medical School at a cost of £210,000.

Limmer Holdings has been awarded contracts worth more than £24,000 for asphalt surfacing, road construction and drainage. These include a £242,000 job-contract at the new fruit, fish and vegetable market in Manchester, on to which work is expected to start in July 1972; and construction and drainage work for the Edinburgh Corporation and the Borough of Middlesbrough.

New freight service on Heysham-Belfast route

BY JAMES McDONALD, SHIPPING CORRESPONDENT

A NEW roll-on, roll-off freight service between Heysham and Belfast, jointly operated by Belfast Steamship (a subsidiary of Coast Lines, which is a member of the P and O group) and British Rail, will come into operation next Monday. The service—operated on a Monday-Saturday basis—will use, on the Belfast Steamship side, the unit-load vessel Saaletal, on charter to the company. British Rail will use its own vessels, and will contribute its port facilities and services at Heysham, while Belfast Steamship will put in its group's road haulage services and the services of its terminal at Belfast. "The trade will be split down the middle," said a Coast Line spokesman yesterday. Also there will be a joint sales effort by BR and Belfast Steamship to generate trade for the service. The Saaletal will leave Belfast at 1830 hours to arrive at Heysham at 0230 hours, and two hours later will sail, arriving at Belfast at 1630 hours, so providing a round trip every 24 hours. This is the first time that Belfast Steamship has operated out of Heysham. The Saaletal, at present on the Ardrossan-Belfast route, has sleeping and catering facilities for 12 vehicle drivers.

WINE

A report on the French Vintage

BY EDMUND PENNING-ROWSELL

In the leading French wine districts the results of the 1971 vintage seem more likely to be admired by the amateurs than by the professionals. For the wines look like being short in quantity, good in quality and expensive. The amateurs can wait to make their personal selection, but the wine trade here, probably with large quantities of unsold 1969 and 1970s on their books, may have to find the money relatively quickly to buy the third vintage in a row; an uncommon occurrence.

About the shortfall in quantity there is no question. After an early spring, hopes of a large crop everywhere, to follow the huge harvest last year, were dashed by a poor flowering of the vines in a June as wet and cold as in France as it was in Britain. As a result there was widespread coulure, when the flowers or tiny grapes drop off. After that nothing could alter the prospects of a small quantity.

However there followed an almost surprisingly fine summer, with July and August wonderfully sunny and warm, though August was marred as it nearly always is, by hailstorms in some areas, notably in the white wine areas of the Côte de Beaune. In September there was some damaging hail in the Graves area of Bordeaux, as well as moderate rain in the second week, and the more violent storms about a week before the vintage began, generally on the 27th. Yet these latter probably did more good than harm in refreshing the dry vines and swelling the grapes, which were small.

The dry August and the fine, other end of the fine-wine scale

sunny September certainly saved the vintage, apart from the Rhône Valley where the weather was more dependable. This fine weather applied as much to Alsace in the north-east as to Bordeaux in the south-west, whose Atlantic dependent climate results in sudden changes. This variable climatic condition accounts in part for the variations in results from the Gironde, the largest fine-wine area of France.

Outside Bordeaux the quality of the 1971 vintage seems not in doubt. When I was in Champagne early in the fourth week of September, not only was the short vintage almost over, but there was already no uncertainty about the result: a fine year, likely to be a vintage one, but dreadfully short in quantity. In Alsace the crop deficit was not quite so marked, but the fine quality is assured.

In Burgundy too there was no scepticism about the results of a vintage still in its last stages. One distinguished shipper breathed to me a possible comparison with 1939, another with 1961: magic years in the list. As always, a caveat must be entered over burgundy, which varies greatly from grower to grower and merchant to merchant. The market had not really opened when I was there, but everyone was expecting higher prices, and Pouilly-Fuissé, whose average price per cask had risen from Frs.600 in 1966 to Frs.1500 in 1970, was being notched up at Frs.2000 as the vintage closed. Caused by U.S. demand for a wine in limited supply, this rise is not a fair indication of the movement of prices. Yet at the end of the fine-wine scale

what will be the price of Montrachet, which sold for around Frs.10,000 in 1970, but this year was ravaged by August hailstorms, which tore ripening bunches of grapes from the vines? It will be interesting to observe the quantities offered and the prices paid at next month's Hospices de Beaune sale. Anyhow it seems fairly clear that '71 will be a vintage for the hungry drinker, especially perhaps for the red wines.

For Beaujolais, the quantity situation is less bad than further north, for the crop was described to me as "a small average." Scarcely less of a problem than coulure are the voracious *beaujolais nouveaux* and *beaujolais de l'année* buyers, who by exploiting the fashionable demand for this half-washed wine force up the price and absorb supplies that might be more traditionally treated. However there is no doubt on the spot that '71 Beaujolais will be excellent; a wine to keep, if anyone will give it a chance.

The Rhône crop will be good and sufficient to go round, and so doubt the "importers" of Beaujeu and Nuits St. Georges will secure their ration to "fill out" the cheaper blends of Côte d'Or wines.

In Bordeaux the situation is, as always, more complex. Apart from weather uncertainties, the problems of assessing a vintage there derive partly from the number of grape varieties grown. Whereas in Burgundy there is only the Pinot Noir (or Gris) for red wine, while Beaujolais depends on the Gamay, in Bordeaux there are the Cabernets Sauvignon and Franc, the Merlot and the marginally employed

Petit Verdot and Malbec. A simple Palmer picked its Merlot early and paused for the Cabernet. Rausan Ségla, just opposite Palmer, started on the 30th, a day also favoured by such leading châteaux as Latour, Mouton, Rothschild and Haut Brion. The last of these, with an army of 200 pickers, had finished by October 4, while Mouton was through by the 10th. Yet Lafite, traditionally a late starter, only sent the troupes into the vineyards on 4th, hoping to find *surmaturité*.

In spite of the impossibilities, 1971 will certainly be at least a reasonably good claret vintage, though one that may take careful selection. Classified growth prices might well start at the level of the second *tranche* (slice) of the opening prices last year. Even if they do not sell out, the owners will welcome the chance to accumulate a little stock. It is the *crus* *inmurens* growers that need our sympathy, and maybe our orders: a plentiful '70 does not make up for a poor '68, and short crops in '69 and '71.

Sauternes prospects are not clear, for heavy rain in the middle of what is always a late vintage there may have dampened what previously were high hopes. Certainly the Sauternes district, where several classified growth châteaux have recently changed hands, is in need of a succession of good vintages.

Written while in many cases the wine is still in the fermenting vats, this must be only an interim report, a forecast not a firm view. It is no time yet to talk up and buy up the '71s: that can be left to the *beaujolais nouveaux* boys.

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The Executive's World

EDITED BY
DAVID PALMER

years U.S. companies have sent a steady flow of Americans over to Britain to sort their subsidiaries' management problems. Now look what's happening

Blimey O'Heinz

by KELSEY van MUSSCHENBROEK

NOVEMBER 1 Mr. Anthony Gookin will start work in Pittsburgh as senior vice-president of America and Pacific, at headquarters of the H. J. Heinz Company. In terms of alone he will be the second important man after the president in what is now a billion-dollar multinational food company—he will be responsible for the U.S. business.

That makes this a remarkable appointment in that few non-Americans (Heinz is Irish) scale the heights of major U.S. corporations. At all, but even fewer do it at the age of 35. Moreover, O'Reilly has only been with the well-known canned soup and food company for two-and-a-half years.

His progress is also very much a reflection of Heinz's own rejuvenation which has seen this century-old family controlled company move, in the space of six years, from being one of the U.S. food industry's also-rans to a position where it is now rated as one of its more interesting recovery stocks. To understand this corporate turnaround one has to look not only at the old Heinz, but also at the special relationship between Pittsburgh and Hayes Park, Middlesex, headquarters of Heinz's U.K. offshoot.

When Henry J. Heinz founded his food company he did so on the simple maxim that "to do a common thing uncommonly well brings success."

By the early sixties, however, the group's overall performance had begun to go uncommonly badly. This was especially true of the American market where Heinz was being trampled underfoot by Campbell's (in canned soups), Gerber (in prepared baby foods) and even by relative newcomers like Norton Simon in tomato ketchup.

In 1963, for instance, total earnings fell 12 per cent, although sales were up by 24 per cent; Heinz's net margin on sales shrunk to a derisory 2.7 per cent. This was Heinz's nadir, made all the more worrying by the fact that 85 per cent of profits were being generated outside the U.S.—and that meant largely in the U.K.

Over here Heinz was everything that in America it was not: it dominated (and still does) the soup market, the baby food market, the ketchup market, the baked beans market. In several other areas—from sandwich spread to canned potato salad—Heinz virtually was the market.

The British subsidiary was often mistaken for the parent company. Then in 1964 Henry J. Heinz II (grandson of the founder) took a crucial decision. He put one Mr. R. Burt Gookin in charge of the U.S. division. Burt Gookin had worked for 30 years, from being one of the U.S. food industry's also-rans to a position where it is now rated as one of its more interesting recovery stocks. To understand this corporate turnaround one has to look not only at the old Heinz, but also at the special relationship between Pittsburgh and Hayes Park, Middlesex, headquarters of Heinz's U.K. offshoot.

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Gratifying results

To-day Heinz is as much Burt Gookin's company as it is the family's. Since 1964, Heinz's worldwide sales have risen by nearly 100 per cent, earnings per share by 109 per cent, and earnings per share by 109 per cent. The gratifying results for its share price which has moved from a 1964 "low" of \$18 to around \$42 to-day, after adjusting for share splits.

When Burt Gookin became president of Heinz he set the group a sales target of \$1,000m. by 1973 or 1974—sales were then running at \$620m. The fact that the company is more than a year ahead of schedule owes much to the management shake-up that Gookin has engineered at Heinz.

In doing so a number of Heinz traditions have gone by the board—many of them more fundamental than the ditching of the old "57 Varieties" logo.

One such tradition was that only insiders would get the top jobs. Part of that tradition himself, Gookin quickly broke it. Another was that the all-important British company was steered with the lightest possible touches

from Pittsburgh. Gookin broke that tradition, too.

Two key North American appointments quickly went to outsiders, while for this third Gookin called on Hayes Park. John Connell (then marketing and home sales director; U.K.) went to Canada in 1966 and then on to Pittsburgh as senior vice-president, North America, two years later.

Gookin once again plugged the Canadian gap with a man from the British company, and in so doing left it with a succession problem for managing the U.K. division.

The solution was provided in the form of an ex-Irish director. The entrepreneur is given a joint marketing deal with the Irish Sugar Company.

With O'Reilly now moving to Pittsburgh John Connell is returning to take up the job he was originally destined for six years ago—a measure of the continuing importance of the British subsidiary which still accounts for 32 per cent of total group earnings.

When Gookin started to revamp Heinz it was, therefore, probably inevitable that he should include the U.K. in his plans. It was not so much that Britain was slipping back—although net profits did dip slightly in 1969—but more a case of good not being good enough against a background of new corporate yardsticks.

Why O'Reilly? The right place and the right time cannot be the whole explanation. Gookin is a great believer in trying to move a large company forward by harnessing "entrepreneurial" management. O'Reilly is clearly in that mould. Gookin is also a hard worker. O'Reilly puts in a regular 12-hour day. Moreover, when one remembers that Gookin's one major passion in

life, outside Heinz, is sport (notably golf) the very obvious empathy between the two men is not hard to understand.

"Benediction from the top"

O'Reilly says bluntly: "I work for Burt Gookin." His time at Hayes Park has reflected Gookin's style of management which O'Reilly defines in very Irish terms. "It is financially disciplined yet non-authoritarian. The entrepreneur is given benediction from the top."

In two important respects Heinz has undergone fundamental change: in its management structure and in its marketing strategy. To start with Heinz's U.K. Board now has five new directors (four previous names have disappeared from the list) each of whom is effectively a managing director in his own right. Explains O'Reilly: "Previously these men had line responsibility only. Now they run their own businesses as Cream (conventionally canned) have already passed film, in sales each—normally regarded as a benchmark for profitable success in the grocery field. Three more new products look like following suit, which is high scoring in an industry where new products have a failure rate of 80 per cent."

Elsewhere Charles Lowe is also responsible for the gathering momentum of Heinz's catering sales.

Heinz's new variety of management has also been matched by a significant shift in its marketing strategy. The first overt sign of which was the recent decision to reduce its cash discount to the trade and use the money saved to boost its media advertising. Basically,



O'Reilly, "tipped for the top."

of course, there is nothing new in trying to strengthen a brand franchise with the public, but the timing of the move made it clear to the increasingly powerful supermarket chains that Heinz had been squeezed far enough in terms of the amount of promotional money the company was prepared to see diverted through the store rather than spent direct on getting through to the consumer.

He does not deny that he inherited one painfully embarrassing acquisition (a meat company) which he has been unable to sell off, and which is still a loss-maker. "Take out Moss Waltham (the meat loser)," he adds, "and last year we had the biggest single rise in profits in a decade. It should not be rates which relate discounts not allowed to detract from the very only the volume of an order real results our profit improvement teams have had elsewhere."

Burt Gookin obviously agrees. Otherwise he would presumably not be handing his Irish 'discovery' a business two and a-half times as large as he is going on with.

Hard look at structure

By the same token, Heinz is now taking a hard look at the structure of its "case rates"—rates which relate discounts not allowed to detract from the very only the volume of an order real results our profit improvement teams have had elsewhere."

Burt Gookin obviously agrees. Otherwise he would presumably not be handing his Irish 'discovery' a business two and a-half times as large as he is going on with.

INDUSTRIAL FILMS

Find the right audience

by JOHN CHITTOCK, INDUSTRIAL FILMS CORRESPONDENT

FILM, when made, needs to be seen by the right people in order to be effective. This means that information about the film must reach the right people, and in a form which encourages their attention. In practice, there are still too many

ROs and Press officers who assume that the very creation of a film is the completion of communications cycle.

For every film made, there is always a unique group of key people and organisations that would be informed about its existence—although too often overlooked. For example, the British National Film Catalogue, the Central Office of Information, the regular industrial film circuit and the specialised trade press, in some cases the British Council (which distributes films overseas), in other cases a series of trade and national agencies depending on the subject of the film. How many PR people in the chemical industry, for example, know that the Research Institute of Chemistry publishes a comprehensive catalogue of films available on the subject? Information on such matters can be obtained from the British Industrial and Scientific Film Association (183, Ragant Street, London, W.1).

The real stumbling block that hinders the men out from the boys, however, is the Press. Failure to preview. Failure to write key people is a common fault. Choice of clashing dates is another—like the legendary case of the motor company, kinder not name, that held a spectacular film preview of the new model of the Guild of Motoring Writers' annual dinner. The British Industrial and Scientific Film Association maintain a series of films, although not available, could help if companies used it more often.

In recent weeks, the Department of Employment's film preview about the Industrial Relations Act clashed with Shell International's preview of *Oil and Soul of Japan*; the same Department's film, *Training Pays*, clashed on another day with British Petroleum's preview of two excellent documentaries, *Alaska—The Great Land* and *Flight Plan*. The Alaska film is an interesting account of the country that now yields oil in place of gold; the second film is a startling examination of the problem of crowded skies in world aviation.

Another neglected factor is the choice of venues for previewing films. Films demand a seating preview. Films demand a seating preview. Films demand a seating preview.

Full marks, then, to EMI for sensibly using the National Film Theatre for their latest management training film—*Focus the Future: Introducing Long Range Planning*. In case PR people fall at the idea of hiring the NPT with 500 seats, I should add that this cinema now has three auditoria—No. 2 seating 160 and No. 3 a mere 40. My surprise on arrival for the EMI film preview underlined this point: a huge queue of blue-jeaned, hirsute hippies. Struggling for admittance to a film on long-range planning? In fact, heading for the larger auditorium which was screening a programme of American revolutionary cinema.

The National Film Theatre is now Britain's most versatile show-place for films—especially now that it has recently opened a splendid restaurant with panoramic views of the River Thames; all available for hire. Nevertheless, the NPT still needs more funds to bring its projection facilities completely up-to-date—as, for example, by the installation of 8mm. equipment.

With other colleagues of the Press, I suffered another film show in a curtailed-off enclosure when RM-EMI showed a new NATO film—*Versus*. Fortunately this swashbuckling appeal to make peace not war, uses such a frenetic style in its aim to reach young audiences that the noises beyond the curtain were lost.

A quiet, select and comfortable cinema where the projection is always good is Guild House—another available for hire. This was the venue last week for a new Guinness film, *Guinness for You*—a beautifully photographed production which, while pleasant to watch, seems pointless unless you read the Press release: "made to emulate through vision and sound the unique taste of a bottle of Guinness." In the same show was Rocha's *Products*—latest psychiatric film. *The Savage Voyage*, an extraordinary film about anxiety and the range of benzodiazepine drugs now being developed to treat it. This film will grip everyone who sees it, but will be controversial because of its excessively scientific handling of a human problem.

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Process Plant

FINANCIAL TIMES SURVEY

Much publicised problems

DAVID WALKER

process plant industry is a very different business from an integrated whole, despite attempts to time to time to discuss it, though only one cohesive picture of people was involved.

On the one side are manufacturing concerns, some tiny and others very big, actually making hardware but, more often than not, not selling it directly to the final customers.

On the other are the contractors, responsible for the erection, fitting out and, in some cases, the commissioning of process plant for the chemical, oil, steel, and other industries.

Between half and three-quarters of process plant is built by contractors, with the remainder constructed by the industries concerned.

Even then, too, they have often found themselves in the middle of a turnover of £500m a year and account some 10 per cent. by value of the process plant export trade.

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involved in that field. Both British companies and American-owned concerns based here have been buying their way into the Continental contracting industry in the face of mounting difficulties in obtaining an overseas order from a London base.

Some 15 months ago, Davy Ashmore's Power-Gas subsidiary bought the engineering branch of the problem-faced Pintsch Bamag, of West Germany. A year ago, Matthew Hall took a 60 per cent. stake in Belgium's Keyser-Belgie. A step into Germany by Humphreys and Glasgow seems likely following its recent link with Gutehoffnungshütte aimed at penetrating the iron and steel plant market in Britain.

New link

Going further afield, it is now over three years since Simon Engineering, one of the more consistently successful U.K. contracting groups, joined with the Litwin Corporation of the U.S. through its Simon-Carves Chemical Engineering subsidiary to form Simon-Litwin in a bid to give both companies access to the refinery building business in the Eastern Hemisphere.

That formed an important move in combating the know-how problem, linking the resources and experience of Litwin in process design and of Simon-Carves in project execution to provide complete chemical engineering contracting services to the petroleum refining industry on an international scale.

At the same time, many American contracting concerns have steadily built up their U.K. business to the point where a high percentage of the companies in this relatively new, to the U.K., field are U.S. subsidiaries.

As far as restructuring is concerned, the changes are perhaps typified by the reorganisation at Davy-Ashmore over the past three years which, possibly on a vaster scale than at anywhere else, reflects what has been going on in contracting as a whole.

Basically, what occurred was a redefinition of the company's business and a deliberate policy of ceasing to make any equipment which could be bought from external suppliers. The move started in 1968 when the Ashmore Benson Pease fabricating plant at Darlington was sold to Whessoe, and accelerated after the disaster of the company's Power-Gas subsidiary's Conoco refinery contract which eventually cost the group a \$8m loss and an even greater drain on resources.

The result was to turn Davy-Ashmore solely into process-

based contractors, designing and building steel plant, chemical plant and refineries using its own process knowledge whenever possible. Over \$4m. was raised by the sale of assets at a time when liquidity had shrunk and borrowing was at a peak.

To-day a strong cash position has enabled the repayment of loans, including one for \$4m. from a consortium of banks and the Industrial Reorganisation Corporation, and only 5 per cent. of turnover is accounted for by hardware.

Management structure has also been altered to permit more flexibility, and two other sizeable foreign contracting concerns in addition to Bamag Verfahrenstechnik have been acquired. The group, overall, has placed itself well on the way to becoming a highly competitive international concern.

These changes on the contracting side have begun being matched by the hardware manufacturers, who have always tended to be more vulnerable in the face of changing demand patterns.

Among their particular problems has been the fragmentation of the industry which, with a lack of standardisation and specialisation, lives in a perpetual climate of one-off jobs.

The divisions were exemplified by the multiplicity of trade associations for fabricators, a fact whose disadvantages were stressed by the Process Plant Expert Committee set up at the height of the crisis in 1965-66.

To combat it, several of the independent organisations have now merged to form the Process Plant Association, whose 300 members are estimated to represent some 80 per cent. of the industry's fabricators, unit plant manufacturers and component manufacturers.

Near monopoly

According to Cdr. J. A. Hamer, director of the Association, manufacturers had "suffered for long in the 'nut in the nutcracker' situation with the near monopoly British Steel Corporation on the one side supplying the raw material and the large international contractors and the oil and chemical companies on the other playing one firm off against the other."

Despite this great list of changes, it would be foolish to suggest that the process plant industry's problems are over. The need for manufacturers, in particular, to concentrate on import substitution and overseas markets if their business is to expand was underlined by the most recent report of the

National Economic Development Office Process Plant Working Party.

For the industry is still faced with a cyclical demand pattern, and the forecast ahead is for process industry investment to remain fairly static over the next two or three years now that a high point in the cycle appears to have been reached.

The only means in sight of ending the cycles is British membership of the European Economic Community. The EEC process plant industries suffer from a similar problem—but the cycles there appear to operate at such a rate that British participation would cause a flattening out on all sides.

Previously, it had been suggested that the upturn seen in the past two years would continue. But drastically reduced investment forecasts from the chemical industry in particular has substantially altered the likely picture, while the growing delays afflicting attempts to gain planning consent for refinery projects could seriously affect spending by the oil refining industry. That, at present, is expected to rise

sharply, compensating for the Office Process Plant Working decline on the chemicals side.

In consequence, says the Working Party, plant manufacturers will not be able to look for expansion of their business through home market growth.

Either direct sales to final clients overseas, difficult save perhaps in the Middle East and North Africa because of the structure of the industry, or sales to foreign-based contractors look like becoming essential. Both courses of action could prove exceedingly hard going, both on technology and price-competitiveness grounds.

For contractors based in Britain, the picture is much brighter. Their export orders amount to £400m., of which 60 per cent. is accounted for by hardware, against £190m. in 1970 and £150m. a year earlier. The hardware content of those deals, of course, is not necessarily supplied by the U.K.; a quarter has to be ordered abroad for reasons like currency shortage or licence conditions, and another quarter is ordered from overseas because it is better or cheaper.

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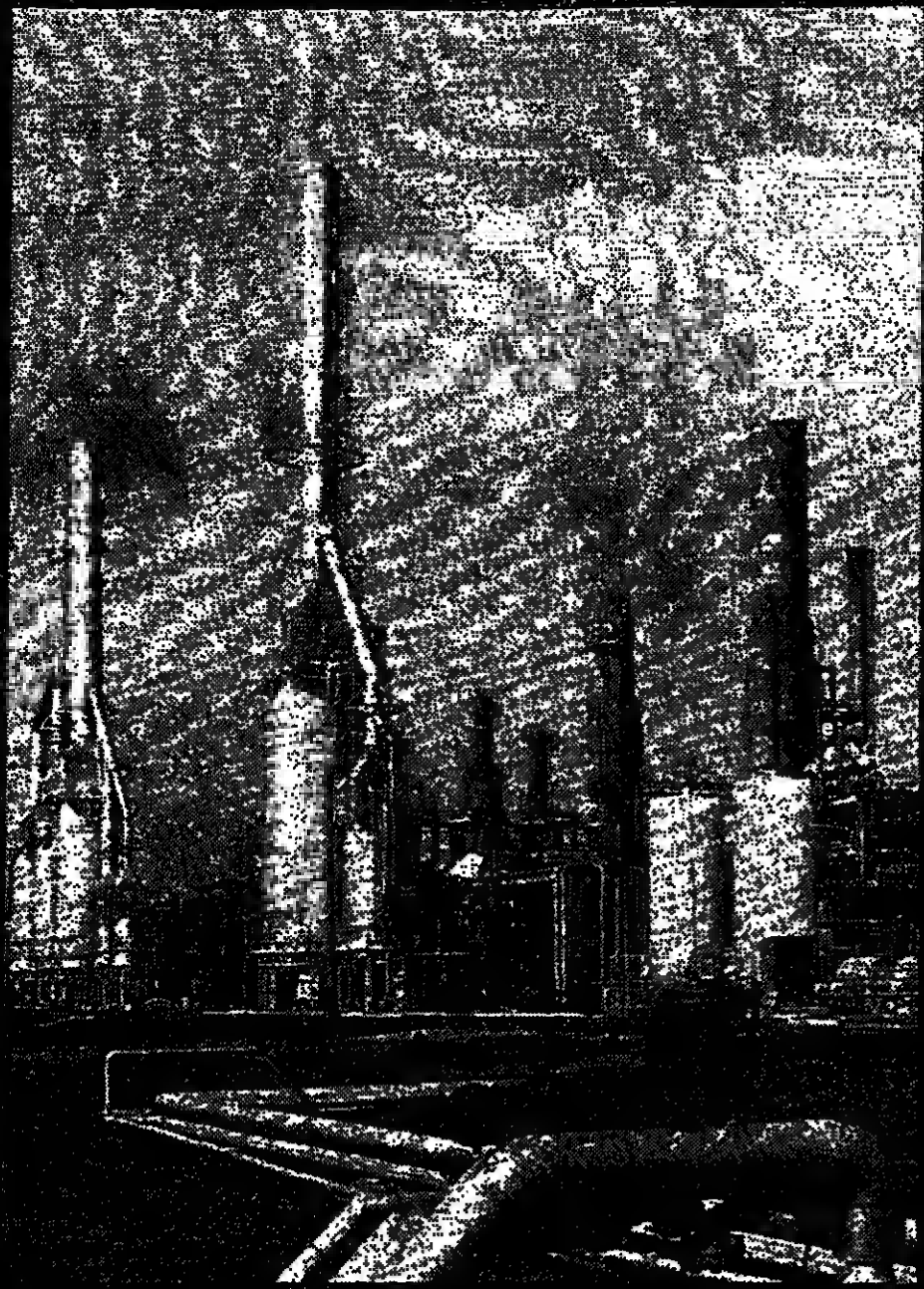
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you may spell it out

tekh'níc (tek-nik), a. & n. = **TECHNIQUE** (usu. pl.) doctrine of arts in general; (pl.) technical terms, details, methods, etc. Hence **technic** (tek-nik) n., person skilled in the technique of a particular art, or in a generally, a. n. [L.L. f. Gk. *tekhnē* (tekhnē) art, see -ic] Hence **technic** (tek-nik), a. of or in a particular art, science, handicraft, etc., as **co. terms**, skill, difficulty; of, for, in, the mechanical arts, as **co. education**, school.

pet'rol - éum n. Mineral oil found in upper strata of earth, used as fuel for heating & in internal combustion engines. (med. L. (L. & Gk. *petra* rock + *L. oleum* oil); n. Refined petroleum as used in motor - cars, aircraft, etc.

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PROCESS PLANT II

Rapid transformation in the gas industry

By ADRIAN HAMILTON

There can have been few industries which have transformed themselves quite so fundamentally and so quickly as the U.K. gas industry. Traditionally a manufacturing concern based on coal, with limited, high-priced markets; in the late 1950s and early 1960s the industry moved strongly towards a new technology of oil-based "town" gas. Barely had this development got under way when the discoveries of natural gas in the North Sea once again revolutionised the picture and started to change the whole direction of the Gas Council and Area Boards from a manufacturing to a marketing basis.

As the industry emerges into the 1970s, this latest revolution is already beginning to come to fruition. Enough gas has been found and contracted for in the North Sea to more than quadruple sales and take over almost entirely from coal or oil-based supplies. The peak of work on laying bulk transmission lines has now been completed and conversion of appliances among customers is well under way. Within the next few years the industry will have completed most of its natural gas programme and by 1978 there will be little of the old industry left.

The implication of these changes for the process plant contractors and manufacturers has been far-reaching. The industry has ceased ordering town gas plants from the early days of natural gas and has already reduced the number in service to 111. By 1977, almost all of these will have been closed as well. At the same time, the alternative opportunities brought by the enormous investment in converting the system to natural gas are also beginning to decline as the main transmission system nears completion and conversion—a field in which a number of contractors are now involved with specially-created subsidiaries—begins to reach its climax.

Fall expected

According to the recent survey of opportunities by the Process Plant Working Party of NEDO, total capital expenditure in the gas industry having reached a level of £130m. and £155m. in the last two years, is expected to fall to £136m. this year and £116m. next year before levelling out at £118m. per annum in 1973 and 1974. Mains transmission and mains distribution will still form a large part of this overall figure but, while expenditure on mains distribution should keep to about £38-40m. a year over the next few years, investment in mains transmission will fall from over £85m. last year to £55m. this

year and then down to £36m. in 1972, £46m. in 1973 and £48m. in 1974. Expenditure on plant and machinery in gas manufacture will virtually disappear to about £1m. a year in 1972 and 1973 and almost nothing the year following.

The main opportunities for large-scale work lie in compressor stations along the transmission lines, in liquefied storage being introduced at the extremities of the system and in processing capacity on the coasts to deal with new supplies of natural gas.

On the compressor side, the Gas Council has already completed two stations at Alrewas and Ambegate and has three more under construction at sites near Peterborough, King's Lynn and Churchover. There are also a further five now being planned, two on Number 3 Feeder, one at the junction of Number 1 and Number 7 feeders, near Scunthorpe, and another couple for Number 5 feeder.

Further projects

In the field of storage, where expenditure is expected by NEDO to rise from £11m. last year to £16m. this year and another £16m. next year before levelling out at a level of £12m. and £11m. in 1973 and 1974, the main development has been the introduction of liquefied storage with associated liquefaction facilities. In addition to the storage at Canvey Island, using gas from the LNG contract with Algeria, the Gas Council is now constructing a plant at Glenmavis in Scotland and has plans for two further projects at Partington and Hirwin, South Wales, as well as underground storage at Ambergate.

Finally, there remains considerable prospects for further terminal and processing facilities for new supplies of North Sea gas. The Gas Council, in association with the producing partnership of Conoco-National Coal Board, is already constructing a third terminal at Mablethorpe in Lincolnshire to take deliveries from Conoco-NEC's Viking field, due to start producing late next year and the site has room for further expansion should new fields be brought in off the coast. Facilities at the Bacton terminal in the meantime have been expanded to take gas from indefatigable field, while, further in the future, there is at least a possibility that gas from some of the major Norwegian fields of Frigg, Cod and Ekofisk could be landed in the U.K. should the Norwegian Government approve the idea of exports from its sector of the North Sea. Phillips gas from

Cod and Ekofisk, at least, might be directed towards Teesside, while there is talk of a liquefaction plant on the Shetland Islands as the best means of dealing with northern finds such as Frigg.

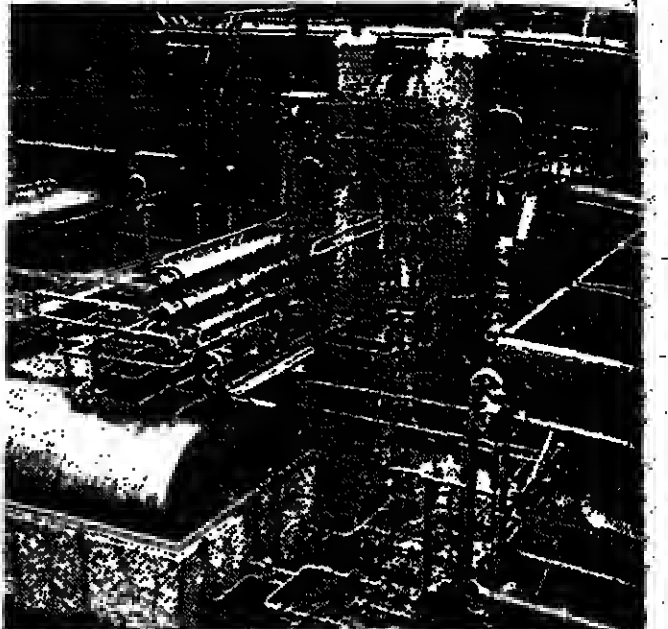
But, while the overall home market has declined in the gas field, a number of exciting new opportunities of gas manufacturing plant have arisen in the last few years abroad. The U.S., in particular, which has long relied on plentiful supplies of indigenous natural gas, is now facing the bleak prospect of gas shortages by the middle of the decade and a substantial gap in supplies by 1980. In Japan, demand for gas—previously relatively small in comparison with the total energy market there—has risen dramatically as a means of combating pollution have become increasingly forceful. In Europe and the U.K., governments are now having to plan against the time later in the decade and in the 1980s when indigenous supplies of natural gas are no longer enough to meet the strong rise in annual demand.

The development has turned attention abroad to the possibilities of supplementing natural gas supplies through the production of substitute natural gas (SNG) from oil and has resulted in increasing interest in the U.K. gas industry's experience in gas manufacture. Of particular interest has been the Gas Council's technology for oil-based manufacture of methane, developed in its research divisions over the past two decades. The Council, and the British contractors involved in building plant for it, had for some time developed technology for production of town gas from lighter fractions of oil—more especially naphtha—using a patented Catalytic Rich Gas process (CRG).

Plants abroad

The process, licensed to contractors, has already been used in the construction of a number of "town gas" plants abroad, particularly in Japan (where Humphreys and Glasgow has built four plants with the possibility of one or two more still to come), and more recently in South America at Sao Paulo.

With the coming of natural gas, the industry turned its research interest to the creation of substitute natural gas (which has a different calorific value and make-up), using the same processes and licensing contractors such as Humphreys and Glasgow, Power Gas, Woodall Duckham and Whessoe with the CRG process. An SNG plant using the process has already been built in Italy as part of



Automatic removal plant installed at the 1st Grain Works of the South Eastern Gas Board.

a Liquefied Natural Gas complex tract for a SNG plant using at La Spezia and there has been interest shown in Japan and elsewhere, but the really big market has emerged in the U.S. Laporte Industries and which is building a plant through its 50 per cent subsidiary, Catalco.

Five contracts

So far the Gas Council has gained royalty but worth about £2m. in all the CRG process for substitute natural gas. The five contracts so far negotiated or in the process of negotiation in the cover plants with a capacity about 900m. cubic feet per day and the total potential demand for SNG plants in the country expected to grow to more than three times this amount by the next few years. Long term, the Gas Council and U contractors are also involved with research technology on manufacture of substitute natural gas from crude oil the heavier oil products through an oil hydrogenation process either by the gas recycle hydrotreater (GRH) method or a fluidised bed hydrogenator (FBH) process.

Humphreys and Glasgow, in association with Lummus, has already announced orders for two plants, worth \$52m., from Consumers Power Company and Brooklyn Union Gas Company, and more recently has been involved with Lummus in a major \$25m. contract with the Algonquin Gas Transmission Company of Boston. Under the terms of the agreement between the two contractors, Humphreys and Glasgow (International) is responsible for the fundamental process design and performance of the gasification of the plants, while Lummus has been licensed to engineer and construct them.

At the same time, Power Gas, through its U.S. subsidiary Wellman-Lord, has gained an important SNG contract with Columbia Gas, while Woodall Duckham, in a sub-licensing association with Bechtel of the U.S., is thought to be also negotiating a substantial U.S. contract.

These processes, though commercially advanced, CRG, do not suffer from the same limitations of feedstock CRG and could have considerable potential longer-term. CB has already been used extensively to supply high calorific gas with which to enrich a lean gas from ICI steam hydrocarbon reformers up to two gas value; and the process licensed to a number of contractors, including Power Gas, Humphreys and Glasgow at Whessoe. The process, however, cannot cope easily with crude oil and sulphur, but it could have potential uses when introduced into a complex with desulphurisation of fuel oil.

FBH, on the other hand, can use crude oil with sulphur and has, therefore, much wider applications. The technology, however, is still at a relatively early stage and the process is expensive. The Gas Council, already associated with Japanese pilot plant run by Osaka Gas, but really needs the impetus of a commercial plant in the U.S. to get a take-off demand. It is now discussing with two U.S. consortia the possibilities of setting up demonstration plant.

Just how big a market substitute natural gas field will provide for U.K. industry is still uncertain. Competition from Lurgi, the German group, is strong, while a Japanese company, Japanese Gasoline, has also entered the field with a process. But the potential is clearly very considerable and on present performance at least, both the U.K. gas industry and the plant contractors and manufacturers have shown themselves in a strong and aggressive position to tackle it.

Continued on next page

Planning for a bigger electricity demand

By HAROLD BOLTER, Industrial Correspondent

Official estimates of the growth of electricity consumption in the U.K. have been scaled down appreciably over the last few years as a direct consequence of low national economic and industrial growth. If there is any consolation at all for process plant manufacturers it is that power station plant ordering is now "about at its nadir," in the words of the Central Electricity Generating Board, and should tend to increase from now on. Refractory measures brought in by the Government over the last six months should also help to bring about improvements in a market which has fallen sharply in the last year. Overall growth in the economy on the scale now being predicted by the Government should bear directly on the market for electrical plant eventually.

Recent slippage

The process plant industry's interest in electricity supply is a significant one, despite the recent slippage. The industry supplies boilers, nuclear heat exchangers, pipe-work, condensers and feed water heating plant, pumps, valves, controls and instrumentation to this market.

The extent of the fall in demand is clearly shown in official returns from the CEBG and the Scottish electricity board. In 1970 orders for process plant equipment were worth £53m., with a 20 per cent weighting for erection costs, but this year the value of this business is not expected to exceed £39m.

The extent of the cut-back within turbo-generator manufacture itself and on ancillary industries producing process plant is clearly shown by a comparison with earlier years.

In 1965 orders placed by the industry for process plant were worth £56m., by 1966 they had risen to £84m., and by 1967 they amounted to £92m. Since then, however, they have fallen sharply, to £34m. in 1968, £66m. in 1969 and £42m. in 1970, when erection costs are discounted.

This, inevitably, has had a strong effect on employment and redundancies within Rey-

rolle-Parsons have similar roots. One of the major problems for the industry is that caused by fairly violent shifts in the level of orders it receives from the electricity supply industry in the U.K. Although these movements are to some extent predictable this is not always the case.

Forecasts of likely future demand for process plant to be used in electricity generation in the U.K. must be treated with some caution, as they were pre-

dictable this is not always the case.

One of the major problems for the industry is that caused by fairly violent shifts in the level of orders it receives from the electricity supply industry in the U.K. Although these movements are to some extent predictable this is not always the case.

Continued on next page

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PROCESS PLANT III

High cost of credit cuts Britain's export chances

by DAVID CURRY

Britain's exporters of capital equipment are becoming uncompetitive not because they are doing too much to do the job, but because the credit terms they can offer are in many cases substantially higher than those tendered by other countries.

This view is widespread among British exporters. They point out that their customers are tending increasingly at the moment of credit. But, so far, they appear to have failed to convince the Government of their case for cheaper credit.

At the centre of the growing discontent is the Government-backed Export Credits Guarantee Department, through which export credits are insured.

But a third of the value of British exports leave these shores under ECGD cover.

The vast majority of exports are financed under supplier credit arrangements, where the exporter sells on credit terms and arranges the financing of a credit as a purely domestic banking operation.

ECGD guarantee

Increasingly, however, British capital goods exports are now being financed under ECGD credit arrangements, where a British bank or syndicate of banks makes a loan to a foreign borrower, and the loan is unconditionally guaranteed by ECGD and is repaid to the exporter on the equivalent of cash terms. Clearly, banks have become increasingly interested in negotiating and managing loans under ECGD buyer credit facilities. Generally, they co-operate with merchant banks so that the merchant bank is the syndicate leader and the clearer puts up the money.

The interest rate for this kind of loan is fixed. It is now 7 per cent, having been 5½ per cent. until October, 1970. The 7 per cent. rate was preferred compared with a Bank

Rate of around 5 per cent. With Bank Rate now 5 per cent. many exporters regard the 7 per cent. rate as punitive. However, the attraction of the rate originally was less that it was preferential than that it was fixed for the life of the loan.

There are three broad types of buyer credit facility. These are: (i) *Financial Guarantee*. Designed for major capital projects. The buyer generally pays 20 per cent. direct to the exporter including at least 5 per cent. on signature of contract. The balance is paid to the exporter by the bank handling the loan arrangements. Repayment period varies between five years and (very unusually) 15 years.

(ii) *Buyer Credit Guarantee*. A "mini" form of Financial Guarantee generally for projects of less than £1m. with a five-year credit period.

(iii) *Line of Credit*. British banks put up credit up to a specified amount which the buyer can call on to pay for purchases made in this country. It operates rather like a current account. The buyer is free to haggle with producers over the price he will pay.

It is usually claimed that buyer financing under ECGD cover has advantages over supplier credits. When the rate was 5½ per cent, this was so. Work in progress could be financed from the loan, paying interest on these borrowings at 5½ per cent, less than it would have cost the exporter to finance work in progress. With the rate at 7 per cent, the exporter can borrow money in the market place at more than 2 per cent. cheaper than the buyer is able to do.

Financing charges under a buyer credit arrangement are payable by the borrower. He is therefore able to identify them for his own assessment of costs of a project or tender. The result of the 7 per cent. rate has been that prospective customers are telling British com-

panies that their tender is acceptable and their prices right, but the cost of borrowing the money to pay that price is too high.

Berne agreement

The above complaints deal with the 7 per cent. rate. But it is difficult for companies to prove that the high rate is why they lost a contract. It is difficult to assess the rates being offered by other countries, since the opportunities for administrative sharp practice, despite the diligent observance towards the Berne Union agreements, are legion.

Generally it is estimated that the French rate works out at something under 6 per cent. (though I have seen it worked out at nearer 7 per cent.) and the Japanese rate at 5 per cent. It must also be remembered that the cost of ECGD cover and certain bank charges must be added to the 7 per cent, bringing it to about 7½ per cent. in practice.

Complaints are also levelled at the length of credit being offered. The ECGD will improve terms if it can be proved that other countries are offering better—the so-called matching principle. Apart from being very difficult to prove (competitors do not naturally tend to disclose information to an enemy), there is little heroic about a policy of always being one move behind the opposition.

Credit is part of the competitive nature of any bid, but it is the part over which the bidder has no control whatsoever. Some companies have been obliged to subsidise their purchaser's borrowings by carrying part of the cost of a 6 per cent. rate. But companies cannot do this and make money. The absurdity is that in this situation ECGD is carrying exactly the same risks as if it were 7 per cent.

A further charge levelled

against ECGD is that it is very difficult to get a quick decision because it is so difficult to approach the mandarins in the Treasury. As one exporter put it: "It is the ability of the other side to move quickly when we are bogged down. An Italian can get an answer with one phone call. It takes a week from London. The Treasury seems to think that the country can only lend the equivalent of its trade balance."

"There is no distinction in the market between those countries that can afford to pay and those who can't. Kuwait is still paying off loans at 5½ per cent. while it has balances in London earning 2½-3 per cent. Some all countries are lending to poorer countries and borrowing from us."

A final complaint is that ECGD cannot send its men overseas to the scene of action. Everything must be done by reference to London.

ECGD, being a Government-financed body, finds it hard to answer these criticisms directly. However there are defenders of the logic of 7 per cent. rate.

They point to the general Bank of England relaxation on the monetary system. There is now, they believe, far less of a deal to be done on fiddling liquidity ratios and less room for the Bank of England to do a deal on liquidity requirements. (The money lent at the export interest rate did not come under the lending ceiling imposed on the clearers). Also, the freedom in the lending market seems likely to push

commercial interest rates up whatever the Bank Rate is doing. There will be a lot of extra lending at higher rates, and, if marginal lending rates shoot up there will be a suction on interest rates. Why, they point out, should banks bother with a 7 per cent. export rate when they can earn higher rates on risky ventures.

If this analysis is correct, then there seems to be a case for subsidising export lending by the Government. This is one solution, but simpler schemes have been put forward.

Rate cut

The first is the simplest of all—a straight cut in the rate. The British Export Houses Association has called for a scheme whereby the major exporting concerns would establish a fund into which they would pay when rates were low and from which they would subsidise high rates. The general effect would be a constant 6 per cent. rate.

The most radical solution is for the establishment of an export-import bank. This is not going to get very far at the moment. Exporters are generally doubtful whether the Government would give the Bank the independence and scope necessary to make it worthwhile. This would include the authority to lend money, and merchant banks enabled to lead money at any rate they could negotiate. The best solution, according to some exporters, and one which would overcome the reluctance of the

City to surrender its expertise in financing, would be for the merchant and joint stock banks to form a conglomerate in the export field. This would enable exporters to have access to the different skills of the banks and their individual experience in particular markets.

However, ECGD itself disposes of a great deal of expertise, and exporters unfailingly praise the personal help they get from the Department. Their complaints are ones of structure and authority. The Department is moving to close an important gap in its cover by introducing insurance against political risk and it may ultimately accept the strong tendency for buying countries to insist on arbitration on their own soil and in their own courts. It is also heavily involved in work involved in Britain's probable entry into the EEC, and it is clear that the Government is hoping for a more rational and standard European framework for credit insurance.

Meanwhile, companies are being faced with the simple choice: lose the order because the rate is too high or fail to make money on the contract because the rate has to be subsidised. Our balance of payments is artificially high. Exporters need assistance now, while we have some time in hand, rather than later when they are being exhorted to go out and die for their product in patriotic tones by politicians telling us that we are always at our best when we have our backs to the wall.

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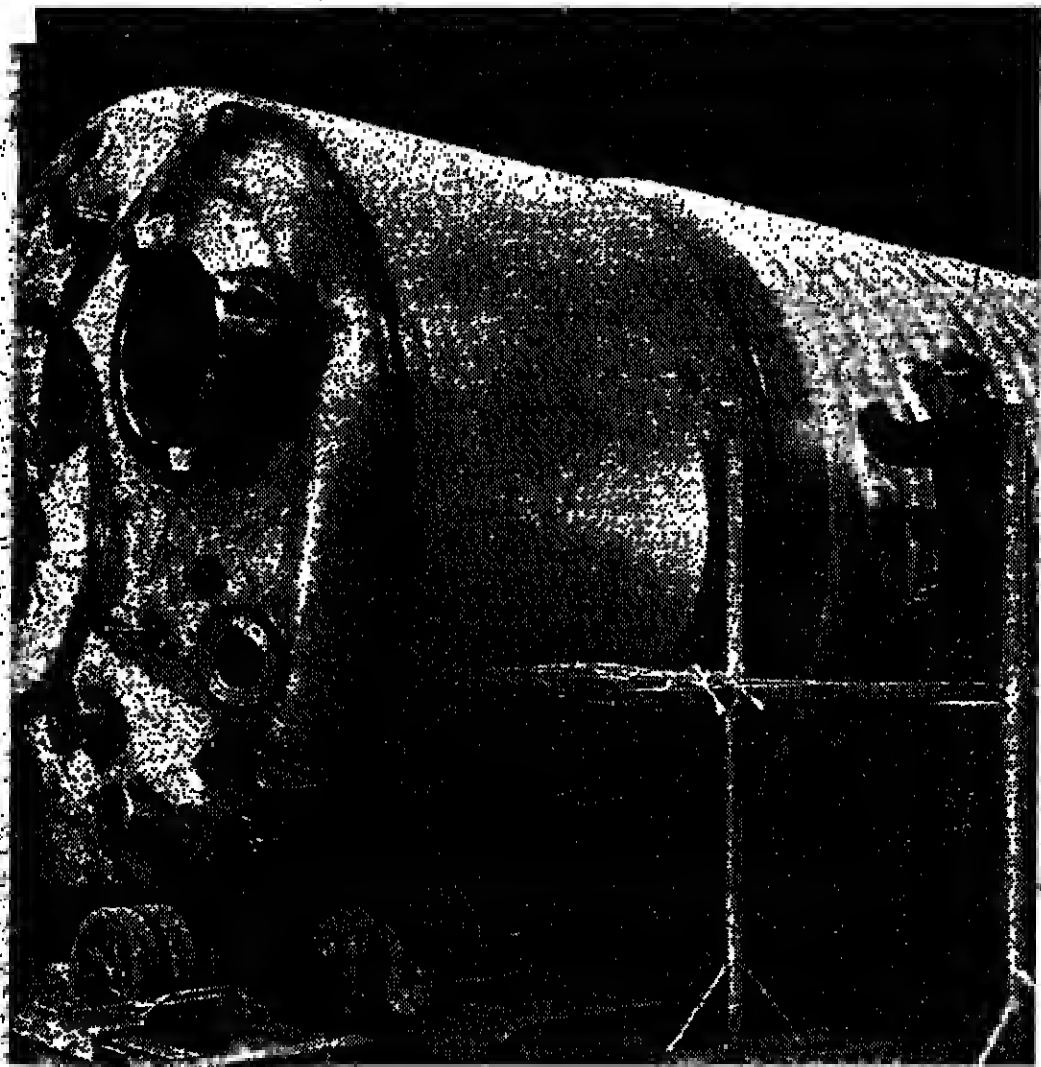
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One of the eight identical 6,250-gallons-capacity stainless steel fermenting vessels at the Hyde works of SSV Ltd., Cheshire.

Electricity —(Cont'd)

Continued from previous page

ared before the Budget and subsequent measures were introduced. For this reason an estimate of spending on process plant equipment at the rate of about £37m. next year and some £8m. in 1973 may turn out to be on the low side, although there will be a two- or three-year lag before the real benefits of reflation show through.

Another factor which may have an important influence on the situation is Britain's likely entry into the Common Market. Membership of the EEC has a dynamic initial impact on industrial production which it adds for the present members of the Community there would be noticeable improvement in ordering by the electricity supply industry.

For the moment, however, process plant manufacturers are only planning for the future within the context of a forecast of a 5.5 per cent. advance in demand for electricity in the U.K., rather than the 6 per cent. believed to be possible earlier.

The Association of Super-

visory and Executive Engineers has pointed out that entry into the Common Market will have other implications for the heavy electrical plant industry, and therefore for process plant manufacturers in general.

An enlarged EEC will have a considerable surplus of manufacturing capacity in the overall area of turbo-generator production and by the late 1970s the main export potential for this equipment could well lie in the hands of European, rather than American or Japanese, manufacturers.

Technical links

Mr. Stanley Steward, the association's President, feels that there is scope for technical links, working arrangements or full-scale mergers across national frontiers in Europe in the field of turbo-generator production, and this suggestion could equally well apply to process plant manufacture.

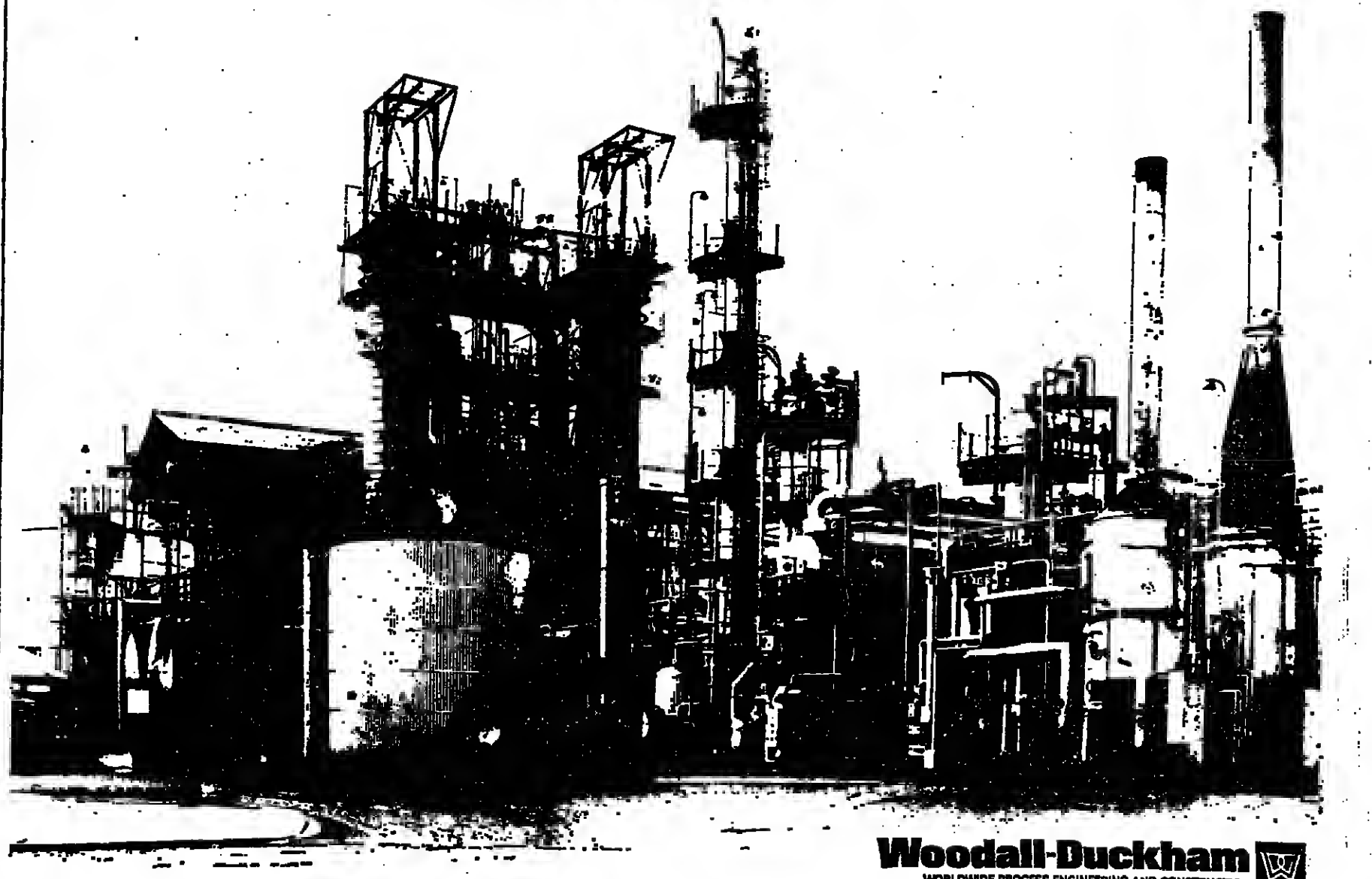
Equally, he feels that perhaps as few as three or four large companies will remain "economically tenable" in the field of turbo-generator manufacture by

the late 1970s. This, in itself, would bring pressure within the hardware sector of process plant for the formation of fewer and even larger undertakings.

It is imperative, however, as Mr. Steward points out, that a policy of open tendering should apply equally to all substantial electricity utilities, private and public, within the enlarged EEC. Unless this is so, manufacturers in Britain would have grounds for complaint, and the CEEB would be justified in restricting its tender lists.

Nevertheless, the Common Market presents process plant manufacturers with a considerable opportunity, particularly those companies with sufficient technical expertise and design and marketing ability to take advantage of the lowering of tariff barriers.

The U.K. market, although disappointing over the last three years, should begin to revive soon and could become extremely buoyant towards the end of the decade with demand for electricity growing more strongly and older plant needing replacement.



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PROCESS PLANT IV

Optimistic prospects for oil refining

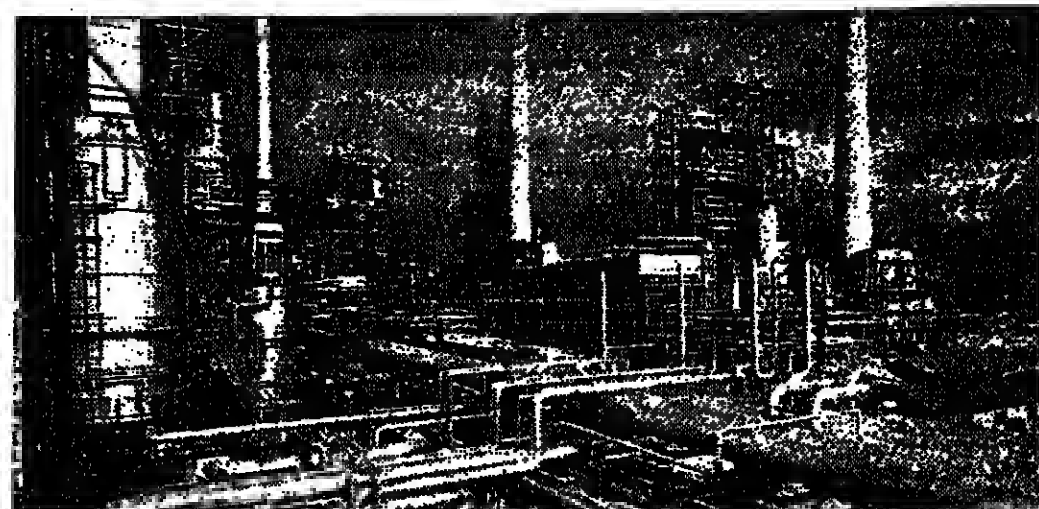
By ADRIAN HAMILTON

In contrast to the chemical and other major processing fields, oil refining in the U.K. has emerged from the past few years of general economic sluggishness with highly optimistic prospects for growth. Though U.K. energy demand has not increased at the same rate as Western Europe as a whole, it still remains strong. The decline of coal and the delays in the nuclear power programme have left oil as the major form of primary energy over most of the last decade, while the tightness of supply last winter has dramatically illustrated the country's dependence on healthy refining capacity. It has also enabled the industry to achieve higher profit levels in the market than for many years. Refining capacity in the U.K., having already more than doubled from 48.2m. tons per annum in 1960 to 112.5m. tons last year, is now predicted to reach 135.5m. tons in 1978 and over 150m. tons by the middle of the decade.

A recent survey by the Process Plant Working Party of the National Economic Development Office has pointed to an especially strong surge of investment by the industry over the next few years. Though delays in completion and execution of certain projects produced an overall 27.4m. capital expenditure on petroleum refining last year, some 51m. less than previously forecast, expenditure this year is predicted to reach a level of about £123m. and to rise again to £154m. in 1978 and £180m. in 1979, before falling to below £100m. in 1980 as the major projects are brought on stream.

Major projects

This, the report argues, is about double the level achieved last year and is mainly due to a large number of major new projects which have been brought forward since the Working Party reported last year, partly as a result of the re-thinking that has followed last year's energy problems. Some 40-50 per cent of the total refining expenditure is on manufactured goods, mainly process plant and largely individually designed, rather than standard items. The report also predicts a rise in



Part of a complete 87,500 barrels a day oil refinery.

expenditure on distribution facilities in the oil industry same time, the company is also completing an expansion of its Fawley plant facilities to raise capacity from 16.5m. tons to 19m. tons by the end of this year.

British Petroleum, which expects to land the first U.K. North Sea oil from its Forties Field off Scotland by late 1974, early 1975, is now "seriously considering" further expanding its Grangemouth plant, where capacity has only recently been raised from 4.5m. to 9m. tons as part of a £73m. oil/petrochemical investment programme. The latest plan would involve doubling capacity again to about 19m. tons at a cost of about £30m., partly to absorb North Sea oil piped from Forties Field to the coast at Peterhead and then south on-shore to Grangemouth.

Of the other existing refining groups in the U.K., Burmah is now completing its long-delayed £30m. programme at Ellesmere Port (with Kellogg as main contractor). The project is designed to take capacity there from 270,000 tons a year to 1.5m. tons and enable the group to be almost self-sufficient in supplies of lubricants and white oils. Gulf is extending certain facilities at its Milford Haven plant and both the Total-Petrofina partnership and Mobil are planning "de-bottlenecking" exercises at their U.K. plants.

Recent entrants

In addition to these major expansion projects, which will form the backbone of new investment over the next five years, there is also a number of more recent entrants to the market seeking new products within the country, but the new units are due to come on stream by early 1973. At the same time, the company is also completing an expansion of its Fawley plant facilities to raise capacity from 16.5m. tons to 19m. tons by the end of this year.

these is Amoco, which recently gained planning permission for a large 4m. tons-a-year plant at Milford Haven. Work on the £40m. programme, with Procon as the main contractor, is now under way and completion is expected in 1973.

In South-East, there are a further three major projects now awaiting planning approval. On Canvey Island, Occidental Oil is proposing a 5m. ton refinery complex at the same time as ENI and in association with Murco of the U.S. is seeking for permission to build a 4m. ton a-year plant on an ENI site nearby. More recently, Total and Burmah, both of which have refining capacity elsewhere, have joined together to seek a 6m. ton a-year project at Cliffe in Kent.

Efforts to build new refineries in the U.K., however, have raised a serious problem over planning permission in the last few years. Both Murco and, earlier this year, Chevron have been refused permission to build plants in the Clyde Estuary area of Scotland after long delays and considerable argument. Amoco itself had to wait more than 15 months for permission and there is still considerable opposition by local interests to the idea of constructing two new refineries on Canvey Island.

The issue is far from being a simple one. On the one hand, there is little doubt that the country will need a high rate of investment over the next ten years if a shortage of indigenous refining capacity is to be avoided. So far, the U.K. Government has followed a generally successful policy of encouraging self-reliance on oil products within the country, but it is clearly a policy which could

be damaged if new companies to the market find too many obstacles to building refineries in Britain. Chevron has already made it clear that it might prefer to seek alternative European supplies from a plant on the Continent and similar warnings have come from Occidental and Murco, in the eventuality of their planning applications are turned down.

Little doubt

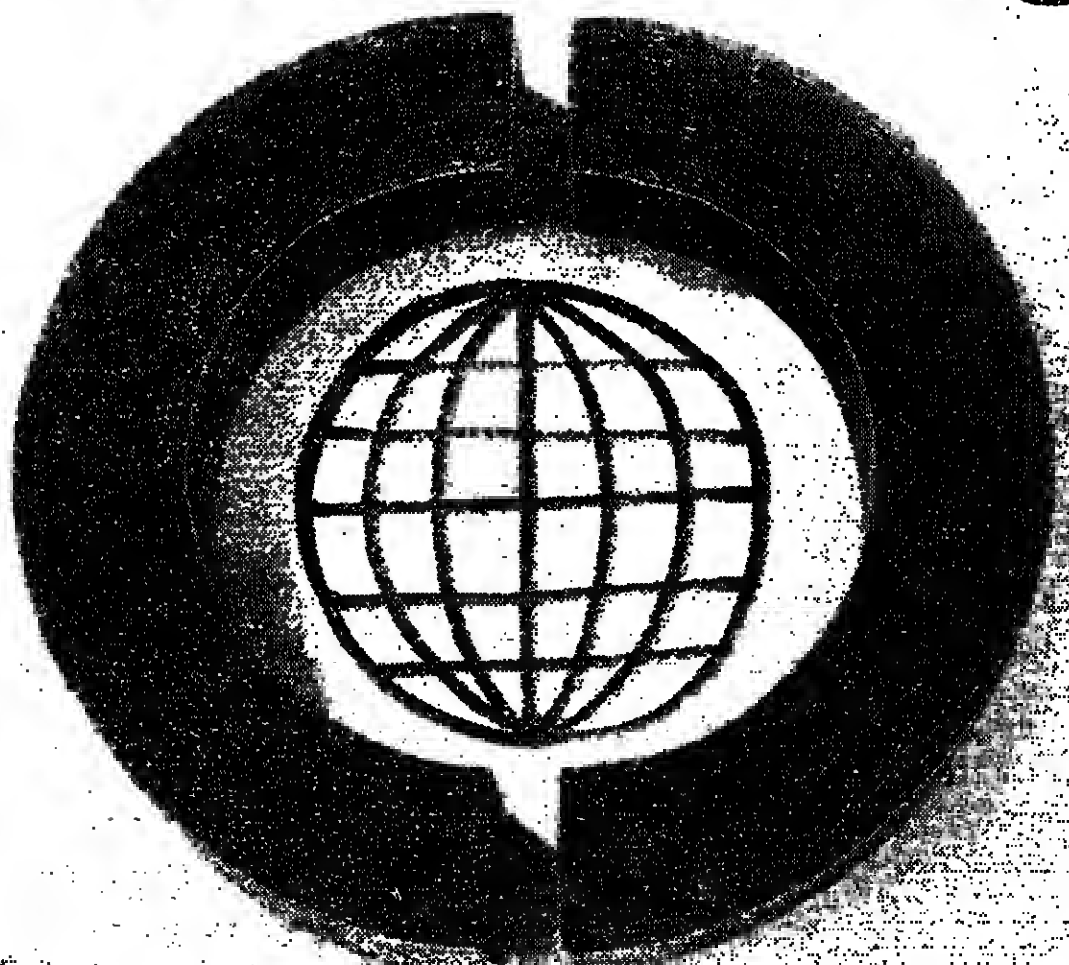
Against this, there is little doubt that the strength of local feeling against new process plant on the scale of modern refineries has become politically powerful and is far from unjustified. The attractions of the U.K. to oil companies is stronger than their warning might sometimes suggest. The coastline has good ports and deep water to handle large tankers. The market is a large and growing one and the conditions relatively free from restrictions. What is needed is a better, "warning light" system for projects likely to be sensitive and a more efficient method for speeding up the whole planning application process without damaging a fair hearing for all interests. Most of the pollution problems associated with refineries can be solved at a cost as can the problems of siting them. Better understanding between the oil companies and local interests coupled with much earlier consultation between them, is developing. While the problem is bound to continue to delay projects and upset them, the opposing interests of environmentalists versus economic need are of necessity incompatible over the long term.

While refineries will remain the major, and most trouble some, field of oil activity for the process plant industries however, the discovery of oil in the North Sea is also raising new and dramatic opportunities. At least two oilfields have been already discovered in the U.K. and by the latter half of the decade as much as 5m. or more barrels of oil a day could be flowing to the U.K. coast. This will involve major crude oil pipeline investment by the oil companies as well as substantial expenditure on terminal and processing facilities on the coast. So far, most of the work has been done by U.S. contractors (who have more experience of off-shore exploration and production), but as development of the new fields proceeds, there will be a need for more U.K. companies to take advantage of.

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New move towards stability

By Commander J. A. HAMER, Director, Process Plant Association

The process plant industry has five main customers, the chemical industry, the oil and petroleum industry, the power-production industry, the steel-making industry and the food and drink processing industry. Of these the first two absorb about 60 per cent of the plant manufacturing capacity.

The users are thus fairly clearly defined and are either direct customers or work through contractors, in either case they are usually fairly large and powerful. They compete for the most part in international markets and have over the years managed either to standardise their products or to break through with new lines, all at least on mass or serial production lines.

The plant manufacturers on the other hand are in an industry which is still fragmented, lacking in standardisation and specialisation, and lives in a perpetual climate of "one-offs." They have suffered for long in the "nut in the nutcracker" situation with the near monopoly British Steel Corporation on the one side supplying the raw material and on the other side the large international oil and chemical companies, playing off against each other. They have been whipping boys for years and have felt the lash of Government inquiries and some ill-informed comment in the Press.

Depressed prices

The severe competition has led to depressed prices and very small profits and this together with the cyclical nature of the market has led to certain inefficiencies and the lack of enough liquidity to up-date staff and plant. At the same time the need to work with as many as nine trade unions in one firm has led to under-utilisation of labour. In times of short order books the well paid highly

skilled men must be kept on, as once paid off they are lost for ever, and expensive capital plant must stand idle while customers complain of the prices. In times of plenty there is never enough capacity and customers complain of the deliveries.

Links established

It is to be hoped that the extension of the home market when U.K. enters the EEC may lead to something radical towards levelling the continual three-to-four-year ordering cycle and lead to more stable trading conditions. Certainly present investigations with the Continental Trade Associations would endorse this hope.

The failure of the manufacturers to compete with the unexpected and unusually high demands in 1965-66 led to an investigation by a Committee of Inquiry on Pressure Vessels and later to one by a Process Plant Expert Committee, and among their many recommendations they noted with concern that the interests of the manufacturers were represented by no many trade associations.

During 1968-69, an investigation into the multiplicity of Trade Associations was carried out by the officers of some nine associations and gradually it became clear that the greatest difficulty in getting together lay in some associations being customer-orientated irrespective of product, while others were product-orientated irrespective of customer.

In 1970, the Councils of Tank and Industrial Plant Association, British Chemical Plant Manufacturers Association and Food Machinery Association, together with their affiliated bodies Bakery Equipment Manufacturers Society, Brewery and Bottling Engineers' Association and Dairy Engineers' Association, set up a steering committee to investigate the possibility of forming a single integrated association to act as a focus within the process plant industry. Its intention was to foster improvements in capacity and efficiency and at the same time to be able to speak with a loud and authoritative voice to customer, supplier, Government and other bodies, and to the Press.

This first step has not been taken without incident, but such incidents as there were have only served to show the need to ensure that further projects must be based on sound foundations. Meanwhile it is hoped that the Process Plant Association (PPA) will fulfil the hopes of its founders and prove of value not only to its members but also to customer, supplier, manufacturer and statistician. At least it will cut down half the alphabet to a mere three letters.

For the first two years of its existence the PPA will be governed by a "transitional" council drawn from the various constituent members at directors' level; under them at senior level will be specialist committees dealing with technical and commercial matters. The Commercial Committee has already established links with the process engineering contractors and with the British Steel Corporation, which are proving of great value to both sides. They have also arranged discussions on the harmonisation of European conditions of contract and terms of payment.

Technical activities have been made the responsibility of a Fabrication Committee and a Process Engineering Committee. On the fabrication side the Association has a joint technical committee with the other Trade Associations concerned and with the British Steel Corporation. Considerable effort is being expended on research and development, and also to institute a National Inspection Authority. Many members are working on new technologies and much work must be done to support them in meeting and reducing the risks involved. British, European and International Standards are under constant discussion.

The Process Engineering Committee will seek to monitor research of interest to members and to maintain a close liaison with user industry associations on technological matters specific to those sections of the process industries, and will be particularly concerned to maintain the close technical liaison with the Food Manufacturers Federation, which the Food Machinery Association enjoyed for some 20 years.

A further major task of the association is the examination of the effect upon its members of Britain's entry into the EEC, particularly with a view to expanding trading opportunities and investment.

PPA is represented on CIL Council, BRIMEC Council, NEDO (Process Plant Working Party), all relevant BSI Committees, the Welding Institute, and the Iron and Steel Consumers' Council. Links are maintained with all three European Trade Associations dealing with process plant and the association hopes to continue to play its part in international, national and informal working groups and committees to the benefit of its members.

PROCESS PLANT V

Chemicals side hit hard by inflation

by JOHN TRAFFORD

To the pessimist, news about the chemical industry these days seems one long string of setbacks, cut-backs and plant closures. The unprecedented drop in sales and profits during the 1960s has become a painful reminder of the contrast between past riches and present penury. No longer does the City glibly categorise chemical companies among the natural growth stocks.

Yet, despite the gloom, chemicals' supremacy among the process industries in terms of investment will go unchallenged for many years to come. At present the chemical industry accounts for some 10 per cent of process plant investment in the U.K. Furthermore, the industry, in common with other process industries, can gain sales not only through a general quickening of the economy but also through substitution of chemical products for traditional materials.

Steel, electricity generation and food processing, on the other hand, rely almost solely on an increasing demand for a higher level of industrial activity.

Although chemicals do have a very strong strategic position in a modern economy, the short-term problems facing manufacturers are hair-raising to say the least. Over the past two years, the cost of chemical plant has not only risen by anything up to 30 per cent, but the rapid rate of process innovation, which held down production costs in the 1960s, has faltered; personnel and raw material costs have spiralled up, and, above all, the growth in demand has suddenly slackened.

British manufacturers, unlike most of their foreign competitors, have also found the net cost of new plant sharply increased. Mr. Barber's switch last October from investment grants to tax allowances. True, the government's help to capital-intensive investors is still exceedingly generous by international standards; but that is little compensation to a British company which has based its profitability calculations for a new plant on the old cash grant system. The international oil majors who pay no U.K. tax have inevitably been particularly hard hit by the new system.

Strenuous efforts

To maintain or regain profits, manufacturers have made strenuous efforts to pass on their higher operating and raw material costs in higher selling prices. Progress on that front, however, has been uneven. In the key petrochemical area—high provides raw materials for plastics, fibres, paints and detergents—figures from the Department of Trade and Industry suggest that prices are rising at an annual average rate of over 7 per cent, which is far below other chemical sectors and quite inadequate to counter the onward march of cost inflation.

Building specialised plants

by Brigadier J. B. BIRKETT, Director, British Chemical Engineering Contractors Association

Building new plants is a vital activity in the process industries; the design and construction of a complete installation often absorbs as many man-hours as are needed to run it for its entire working lifetime. It is therefore not surprising that some of the largest process companies, particularly in the petroleum and chemical fields, keep substantial engineering staffs and build at least some of their own installations. Nevertheless, the use of specialised contractors for doing such work continues to grow and it is worth asking why.

Partly hidden

In the first place management increasingly realise how expensive it is keeping an engineering department big enough to do even part of their own design and construction work, a fact which is often partly hidden by being charged to other activities like development, construction on the other hand are a competitive market and they offer good value for money. Another major factor is the increasing number of companies in such industries as food processing which have not in the past been generally considered as "chemical engineering" but which are now beginning to realise how the skills of chemical engineering can be applied to their problems. Such companies often do not carry staff familiar with what is involved in building new installations and they are now coming to appreciate the time and money a reputable process contractor can save if he is called in at an early stage; they prefer this to the alternative approach of building up their own staff for a project and then having to run it down again.

British process contractors have been building specialised plants all over the world for a long while; however, during recent years they have greatly increased the range of processes and the size of contract they can handle as well as pioneering a number of territories such as Eastern Europe. Contracts over £10m. are not uncommon and some of them, like the \$40m. Polyspinners plant in Russia, are of great complexity. In variety these range from petroleum and petrochemical to pharmaceutical, from fibres and food to fertilisers, from ore treatment to smelting and hydro-metallurgy; and from heavy organic chemicals to the most intricate cryogenic units. These firms are represented by the British Chemical Engineering Contractors Association.

They have been responsible for a huge volume of export business, to the benefit of British manufacturing industry, and their skill and experience in handling any sort or size of contract is available to the process industries all over the world. Nevertheless there are problems that British process contractors have to face, and these were explored recently by the Process Plant Expert Committee (the Wright Report).

There has for example been a tendency with British process companies to handle their

actual drop in 1972 will if anything be greater in real terms. For 1973 the Working Party has forecast a further decline to £280m.

Unofficial estimates are certainly anything but encouraging. The weekly journal Chemical Age in its annual review of current U.K. chemical investment reported that only £202m. worth of new projects were at the planning stage in mid-1971 compared with £392m. a year before. The figures included oil refinery investment and, when this is taken out, the two-year comparison shows a drop of more than half.

Besides fewer new projects, the British chemical industry is going ahead more slowly with what is in the pipeline. By far the most dramatic event of the past year was Shell Chemicals' announcement last January that it was reviewing the whole of its £225m. expansion programme at Carrington and Stanlow in the north-west. The outcome was that many of the most expensive plants would be delayed by two years or more.

BP Chemicals' £85m. petrochemical expansion at Baglan Bay has been subject to unscheduled delays from labour unrest and late delivery of equipment, but not to any planned rephasing of the more important plants in the complex.

Scope for investment cut-backs at Imperial Chemical Industries has been rather more limited than with the two oil companies as 1971 has marked the final year in one of the company's periodic bouts of investment enthusiasm. In March the retiring chairman, Sir Peter Allen, estimated that expenditure in the U.K. this year would be a little above 1970's level of £118m. but that there would be a marked cut back in 1972 and 1973.

Least worry

Perhaps surprisingly, one of the matters causing least worry in ICI's headquarters in Millbank and over the river at Shell Centre is the prospect of U.K. membership of the Common Market. Both companies have for so long been operating on a truly international scale and, especially with Shell, have set up so many production units in the EEC and elsewhere that an enlarged community will do little more than simplify an already existing commitment to serving the west European markets. BP Chemicals, on the other hand, may have a little further thinking to do since it has important but not controlling shareholdings in French and German petrochemical manufacturers dating back to the days before it became a major force in the British petrochemical industry through its acquisition of Distiller's chemical interests. Many of which used to be jointly owned with BP. These Continental shareholdings fit somewhat awkwardly with the wholly-owned chemical manufacturers.

Site work

Another point of controversy has been the problem of late completion and cost over-runs; but these difficulties are by no means confined to British contractors nor indeed to the process industries—other types of site work such as generating plant construction have been worse hit. Part of the difficulty is due to the inability of the equipment manufacturing industry to adjust itself to successive waves of boom-and-slump and part to the ever-present need for technical innovation and for larger, untried limits. But both contractor and client can do something positive about keeping these problems within bounds if they co-operate in resisting any temptation to make late design changes, which are responsible for a great many of the delays that occur in practice.

Traditionally contractors and clients are pictured as being at

U.K. facilities now in the company's possession.

Investment retrenchment has been just as much a feature of the Continental and American chemical industry as it has been on the U.K. The trend has been so world-wide, in fact, that the big process plant contractors which design and build a high proportion of all new chemical plant have been subjected to some introspective heart-searching to decide what they should do in response. The answers seem to be almost as numerous as the number of contractors.

More closely

Some lay emphasis on moving away from such a wholehearted commitment to chemicals and looking more closely at related fields, for example, the supply of "clean" energy such as liquid natural gas (LNG) from the Middle East to Western Europe. Some stress other areas of process industry contracting in which they are already well established, nuclear power generation for instance. Still others see the profits of the future stemming increasingly from acting as "managing contractors" for huge new projects involving for instance natural gas production, electricity generation and fertiliser production without necessarily building any of the plants themselves. Others again look to establishing a presence through a design office and sales staff in foreign countries. And some, of course, do two or more of these things simultaneously.

From Britain's point of view probably the most encouraging development of the past year has been the resurgence of Power-Gas, the Davy Ashmore subsidiary, not just as an English phoenix rising from the ashes of the Cosco refinery debacle but as a truly international process plant contractor. This it has done through acquisition of two German and one American plant contractors. For the first time the U.K. has an organisation which, at least in terms of manpower and location, can match the might of American contractors' far-flung empires.

Whether or not Power-Gas moulds its newly acquired but disparate elements into a co-ordinated team, almost every major contractor now appears to agree on the need to have a number of geographically separated offices to latch on to the rather more meagre orders for chemical plant in the coming decade. Just as the chemical industry itself is now changing rapidly and many of its prominent members are falling prey to others more profitable, so too in the world of the contractors the next 10 years seem certain to witness some dramatic fusions, take-overs or bankruptcies as companies adjust to the changed circumstances of their major clients, the chemical manufacturers.

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Petrocarbon Press Release

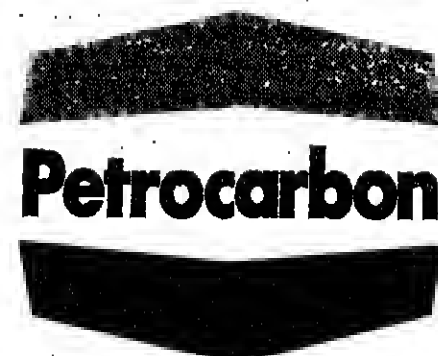
Petrocarbon have been awarded an export contract for a Propylene Oxide/Propylene Glycol Plant by Polimex of Poland. This plant will be built at Rokita and will incorporate the most up-to-date developments in the chlorhydrin process. The propylene oxide to be produced will all be of the polyol/polyether grade and the glycol will be of pharmaceutical grade. The salaction of the chlorhydrin process is in line with the current view that for medium capacities this process is more economic than the 'direct oxidation' process—and will remain so for some years to come. In this particular contract, the propylene oxide capacity is 12,000 t.p.a., only a part of which is converted to glycol. The investment cost is of the order of £1,000,000. Originally this was planned as a conversion unit from a small old chlorhydrin/ethylene oxide plant, which Petrocarbon were to have revamped. Because the estimated requirements of propylene oxide in Poland had trebled in the interim period, it was decided to build an entirely new plant. Petrocarbon are making full use of the wide engineering capabilities of Polimex in the completion of this contract and the bulk of the fabricated equipment will be of local supply.

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PROCESS PLANT VI

Contractors look for overseas business

By L. B. BAKER and D. A. J. SAMOLS, Stone and Webster Engineering Ltd.

The last twenty five years have seen the rapid growth of a number of long established engineering contractors in various countries and more recently the appearance of even more newcomers. The attraction presumably has been the apparent substantial profits to be earned in good times by a service organisation such as the contractor whose cash assets are often minute in relation to the value of the plant to be built, and whose principal costs are those of his staff. As a result, there are now approximately twenty contractors established in London alone, an apparent sign of a successful industry—but what lies behind the facade?

Poor quality

Firstly, when a recession occurs the contractor's very nature can make him vulnerable because his staff being his principal asset, there is little to sustain him as orders fall off and this has led to the regrettable tendency of some companies to adopt a "hire-and-fire" attitude as conditions fluctuate with inevitable result of dissatisfied and poor quality staff. Secondly, because of the high building rental costs in London and the demand for extensive support services, the "break even" point for most contractors represents a disconcertingly high loading factor for his staff if reasonable profits are to be earned, and this factor can well be as high as 75 per cent. of the production staff, i.e., engineers and draftsmen employed on current projects. The third and obvious point is that in a recession new projects are usually the first to suffer so that the contractor's market can vanish literally overnight. Other factors such as technological obsolescence can have the same effect, as for example, the result of the North Sea gas discoveries on the naphtha reforming markets.

None of these problems are new for the industry which has long been resigned to the cyclical habits of ordering of its principal customers. The current fall-off in world trade has, however, brought them into greater prominence for a variety of reasons which have led to a degree of soul searching and changes already. Some

of these reasons are discussed below but it must be remembered that each contractor has in his own particular his dependence on his background, ownership, prior experience and similar factors. The general trends and solutions thus tend to be the same, but the individual solutions will necessarily vary.

The majority of contractors of whatever background have long recognised that the U.K. market alone is far too small and too vulnerable to fluctuations to provide a satisfactory major basis. They have thus sought work increasingly abroad and the percentage has risen steadily and may well run at 75 per cent. or more of the total volume of work of any one contractor. The contracting organisations have thus grown to meet an even larger international market and this trend will inevitably continue but it is only a partial solution to the problems arising. The size of projects to be handled has grown rapidly and while the number of orders may not have increased, the associated work loads certainly have. This is shown dramatically in the table for typical petrochemical plants, but the same situation arises for many other modern industrial plants, for example breweries, power plants, refineries and even roads. However, not only has the direct demand for engineering and drafting risen, but also the demands for personnel in other fields to cope with the greatly increased complexity of these modern plants.

To-day, it is difficult to imagine any major project being built without the assistance of computers and their associated staffs, not only for aspects of process or mechanical design, but also for the control and recording of costs of the thousands of sub-orders involved, for planning and resource allocation of the engineering work as well as purchasing, construction and start-up and not least for the contractor's own integral accounting and personnel procedures. Equipment is frequently bought on the world market and items have to be inspected and expedited in many countries at the same time, requiring a major purchasing organisation.

Similarly, in construction the size and scope of many of the projects is beyond the capabilities of most available subcontractors so the contractor himself may now be a major employer directly, with his own construction equipment, labour

relations experts, supervisory staffs and foremen, and all the other vital groups needed to run a major construction operation in the field. This may involve housing, hiring, training and controlling a force of two to three thousand men at a time on one site almost as a matter of routine. The result of these factors is that an effective contracting organisation to-day can hardly consist of fewer than 500 to 600 permanent head office staff.

An organisation of this size can handle approximately four

established contractors. The control and co-ordination of these multi-office organisations is not easy if work is to be switched smoothly from one to another or very large projects split between several. Endless scope exists and is made use of in inter-company rivalry although so far sister companies do not appear to have actually competed with one another for the same project. Not the least of the problems is that of ensuring worthwhile careers for the various nationals if the individual companies and the groups

cannot provide the service required by the client unless the contractor is involved at the earliest planning stage to permit him to prepare in advance for the new technology required; others are less far seeing.

Fortunately for the contractor, some fields are obvious such as the rapidly rising demand for natural gas. In the longer term, as supplies diminish as for example in the U.S., the trend for oil companies to become "energy" companies is clear. As natural hydrocarbons become scarcer their use for basic fuel will inevitably be restricted if only to provide a source for chemicals. The immense coal reserves are an obvious source of energy and already a large amount of effort is being expended on exploring the various routes to converting it to "synthetic" natural gas or to liquid hydrocarbons as was pioneered many years ago. The scale required to-day is vastly greater, however, and is likely to tax the resources of the contracting industry in the last two decades of this century.

Other natural fields for the contractors to turn to include the food industry, brewing, distilling, steel making, mineral processing, pollution control and the various contractors are each vigorously pursuing these areas according to their respective backgrounds and experience, and also assessment of the market size and the obtainable share.

What is clear is that in the years ahead there will be fewer but larger contractors, not perhaps by purchase (as the contractor's sole large asset is his staff which leaves every afternoon) so much as by closure of those that remain will need, however, to be backed by substantial financial assets perhaps through membership of a large group, for only in this way can the organisation be maintained without violent fluctuations in periods of major trade cycles internationally and also to carry the risks inevitably associated with major projects. In the long term this can only be achieved by a greater readiness of all clients to permit the contractor to earn larger profits for good performance. The alternative is to destroy the one industry capable of providing the skills of research, development, engineering, procurement, construction, project management and financing as a single integrated service to all comers.

TYPICAL PETROCHEMICAL PLANTS (RELATIVE INDICES)

Year	Plant capacity	Manhours of drafting	Total head office hours (including support staff)
1950	1.0	1.0	1.0
1960	3.3	1.25	1.3
1965	10.0	1.75	2.0
1970	15.0	2.5	3.5

major projects per year which leaves perilously little room for misjudgment in taking orders or scheduling projects if a balanced yearly workload is to be achieved.

Leading country

While in theory a contractor could simply enlarge one major office as in the U.S. where more than 3,000 men may be in the head office, in Europe a very different situation exists. The total number of qualified draftsmen in London appears to be in the range of 4,000 to 5,000, imposing an immediate limit on any short-term expansion to the American scale. Secondly, financial or political restrictions, and frequently plain nationalism dictate that work should be done in a foreign location, and most of the major foreign aid organisations limit work provisions in a substantial degree to the lending country. Thirdly, language and frequently complicated local design codes or legal requirements dictate that work shall be done outside the U.K.

As a result, most of the more far-seeing contractors already have offices abroad while others belatedly climb aboard the bandwagon. These foreign offices vary from large fully integrated organisations through partial service, such as drafting and procurement groups down to loose associations with locally

are to succeed and there are some notable variations in success on this score.

Diversification abroad and establishment of large organisations to handle large projects are all very well but what about foreign competition and satisfying the enormous capacity established?

Successful foreign competitors have appeared in the major countries of Europe and are now generally capable of handling any routine refining or frequently petrochemical projects of reasonable size. They are, however, still often at a disadvantage with regard to certain special technologies including hydrocracking and nuclear power plants and also in the necessary experience of handling very large projects which is dearly bought.

The danger of specialisation in any one process field is only too evident from the current sentiment on investments in the petrochemical industry. Nevertheless, there is equally a danger of being over-pessimistic about the prospects of an established industry and to plunge blindly into a diversification programme. Here the contractor is dependent on the operating companies' market researchers as the end-products and demand forecasts are in his client's hands and often closely guarded secrets. Some clients appreciate that the contractor

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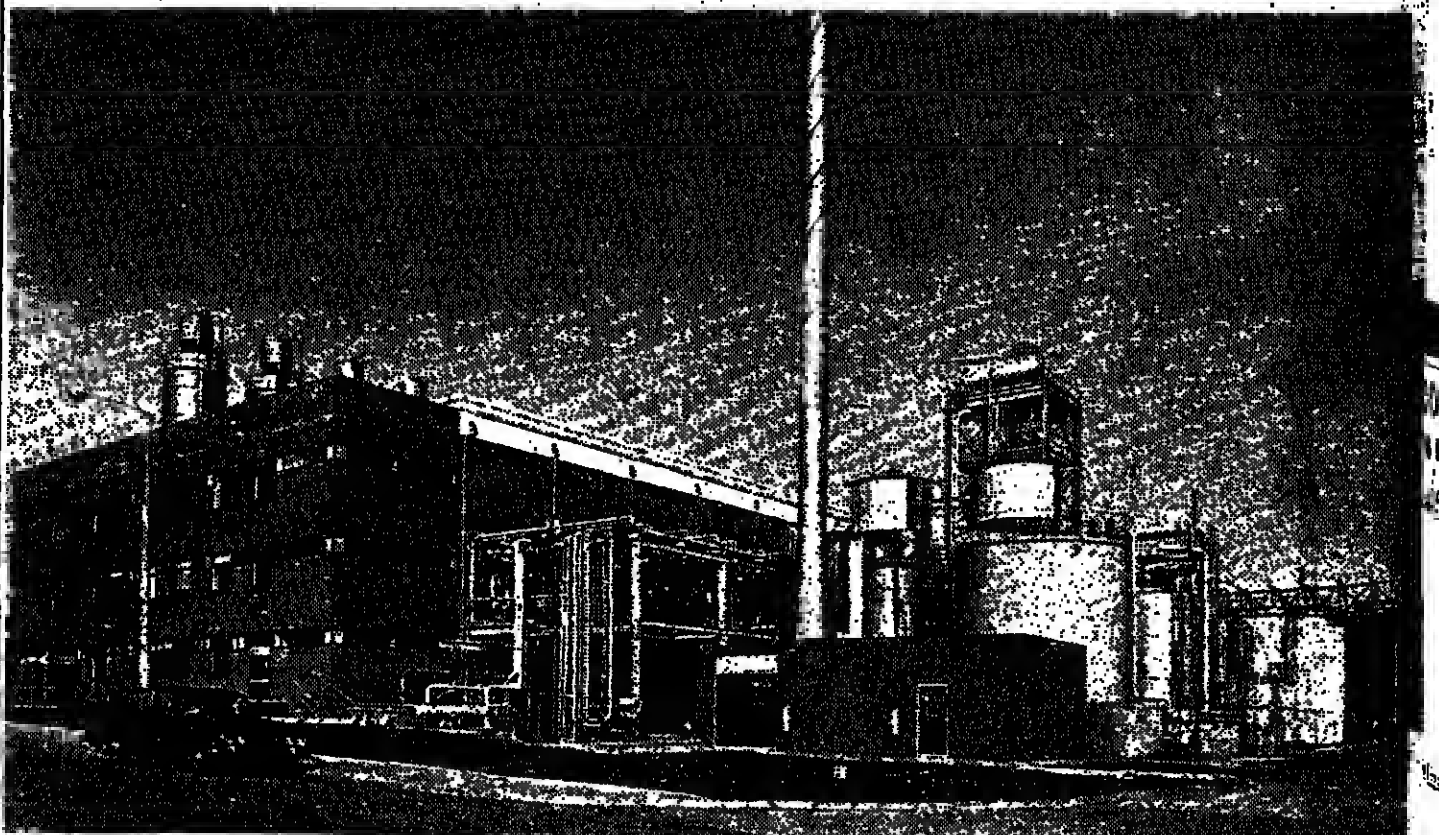
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Export performance causes concern

By MICHAEL CASSELL

With no prospect of a growth home market spell considerable in U.K. demand for process chances for those who are prepared to make the effort. In 1970, exports by process plant new significance and manufacturers are having to inject £180m. of which 60 per cent was added determination into their selling efforts overseas.

The exporting successes of a number of British companies illustrate what can be done in the way of capturing valuable overseas business, given sufficient technical expertise as well as design and marketing ability. The examples of the few, however, remain to be followed by the majority.

The opportunities abroad certainly exist. The very size of the process industries in overseas countries and their rate of growth compared with those of the U.K. manufacturers' present

United States and an even better 11 per cent. in Common Market countries. Petroleum consumption grew in the U.K. by 9 per cent. but in the rest of Western Europe it rose by 14 per cent on average.

Gross investment

A look at recent investment patterns in various parts of the world underlines the picture. In the U.K., gross investment in the chemical industry rose by only 3 per cent. a year in the last decade while in the EEC countries it increased at no less than 10 per cent. per annum.

The picture is also the same in the oil refining industry. Over most of the 1960s, investment in Western Europe was nearly four times higher than in the

U.K. although towards the end of this period the home situation improved considerably.

But, of course, despite the obvious opportunities abroad, the strength of competition from overseas manufacturers and the inherent difficulties of breaking into new markets are sizeable indeed. A major setback, it pointed out by this year's report from the Little Noddy process plant working party, appears to have been the U.K.'s relative loss of competitiveness in terms of export finance.

Historically, the equipment manufacturers have sold their product partly to their ultimate clients, the process operators, and partly to the contractors whose job it is to erect the plant. On the domestic market,

Continued on next page

PROCESS PLANT VII

Worry over economics of pollution control

DAVID GRAYSTON

tion all over the world have reached levels which have seemed incredible. The greatest problem at the moment is concerned with the economics of pollution control. It is technically possible to eliminate most forms of pollution resulting from industrial processes, but the cost of doing so bears no linear relation to the benefits gained. In other words it may be necessary for a company to double its spending on control to effect a reduction of 1 per cent in pollutant output.

Cheaper techniques

A breaking point will obviously be reached in such circumstances, when the cost of safeguards becomes more than the product will bear. Some forms of industry have reached this point already, and are anxiously awaiting the discovery of new and cheaper techniques. Others are casting apprehensive glances at profit margins, and few would be rash enough to say that they are not worried. The trouble, as the first report of the Royal Commission on Environmental Pollution points out, is that the economics of pollution control are not understood beyond a basic supply and demand level. The report says that the economic information needed to formulate decisions on environmental preservation is seriously deficient, in sharp contrast to the amount of data available on the scientific and technical aspects of the problem. It continues: "Scientific and technical information is invaluable, and in many cases may be adequate for reaching satisfactory decisions, but much of it could be wasted if it were not supported by some economic indication of priorities and of the best means of dealing with specific kinds of pollution."

Toxic effluents

agers of accusation have freely waved in the direction of the major processing industries, usually with equal vigour and ignorance. The Mersey and the Tyne are choked with toxic industrial effluents but, it is argued, which has made the Thames uninhabitable to date. The fumes from more than 16m. motor vehicles are currently doing considerable damage to the atmosphere of no good, and domestic fires are also doing a bit to keep the skies over air murky. 80 per cent. of smoke pollution comes from household chimneys. The Government has said that responsibility for reducing a tidal of pollution rests with individual citizens. The best chance for the environment is a commitment on behalf of the public to prevent the excretion of air, water and land. It is plain that the process industries are not by any means the only culprits, or, indeed, the major ones.

Nevertheless, industry is anything but complacent about its achievements so far. The greatest problem at the moment is concerned with the economics of pollution control. It is technically possible to eliminate most forms of pollution resulting from industrial processes, but the cost of doing so bears no linear relation to the benefits gained. In other words it may be necessary for a company to double its spending on control to effect a reduction of 1 per cent in pollutant output.

Last year BSC spent £8m. on the reduction of its contribution to the pollution of waterways. The amounts of water used by the industry are phenomenal: 200 tons of water are required to produce one ton of steel at an integrated plant. Much of this is recirculated, but the average intake figure is still a hefty 37 tons of water per steel ton. The effluents from iron and steel works are of many differing types and amounts of toxicity, ranging from slightly contaminated cooling waters to highly harmful process wastes such as acid pickling liquors and coke oven condensates and residues. A large-scale research programme which is still under way, has led to the development of new pickling and recovery processes. These, when fully implemented, will lead to the virtual elimination of the acidic effluent problem.

Worsening state

The steadily worsening state of the environment in this country has obviously led to changes in the plans and investment patterns of the steel industry, with more time and money being geared to the cutting down of pollution both by treatment and by new methods of production. This shift in emphasis is visible in almost all areas of the process plant scene.

In the chemical industry companies are spending between 24 and 15 per cent. of their total investment in plant in the hope of cutting pollution. The wide difference in figures can be explained by differences in the location of plant for, as one spokesman recently put it, the Mersey estuary does not present the same problems as the middle of the Thames Valley. To concerns such as ICI, pollu-

Heaviest spender

The electricity industry cannot be left out of the reckoning. It has been the heaviest single spender on air pollution control, with a bill of £120m. over the last decade. Most of this has been spent on the regulation of coal-burning plants. Extensive marine and freshwater researches have been carried out in conjunction with Government agencies around many of the Board's generating stations, and a project is now in hand to consider the application of the warm water from cooling towers to the establishment of fish farms. The 1957 Electricity Act introduced a statutory obligation for the Board to take account of environmental protection, but spokesmen stress that the industry was heavily involved in this area before the Bill, and that they regard the problem as a continuing one which must be taken into account at all stages, from the design of a power station, through its construction and siting, and down to spot checks on wastes discharged.

As with the gas industry, whose changeover to natural gas will be 95 per cent. complete by 1976, the electricity area is in a state of flux at the moment with the gradual conversion to atomic power. This will present new problems, and the disposal of radioactive waste is under active international consideration at the moment.

Tolerance levels for all forms of pollution are set by the Government, but the measures taken seem to be hitting harder in some sectors than in others. Nothing on the statute books to date seems to have been able to prevent the adornment of the South Coast by large amounts of crude oil, and it is certain that legislation on car exhaust fumes will be brought in.

When "Nader's Raiders" become a force to be reckoned with over here they will surely take a long cool look at Britain's process plant industry. It will stand the scrutiny well. Things could, and will, become better, but we are still one of the cleanest industrial nations in the World.

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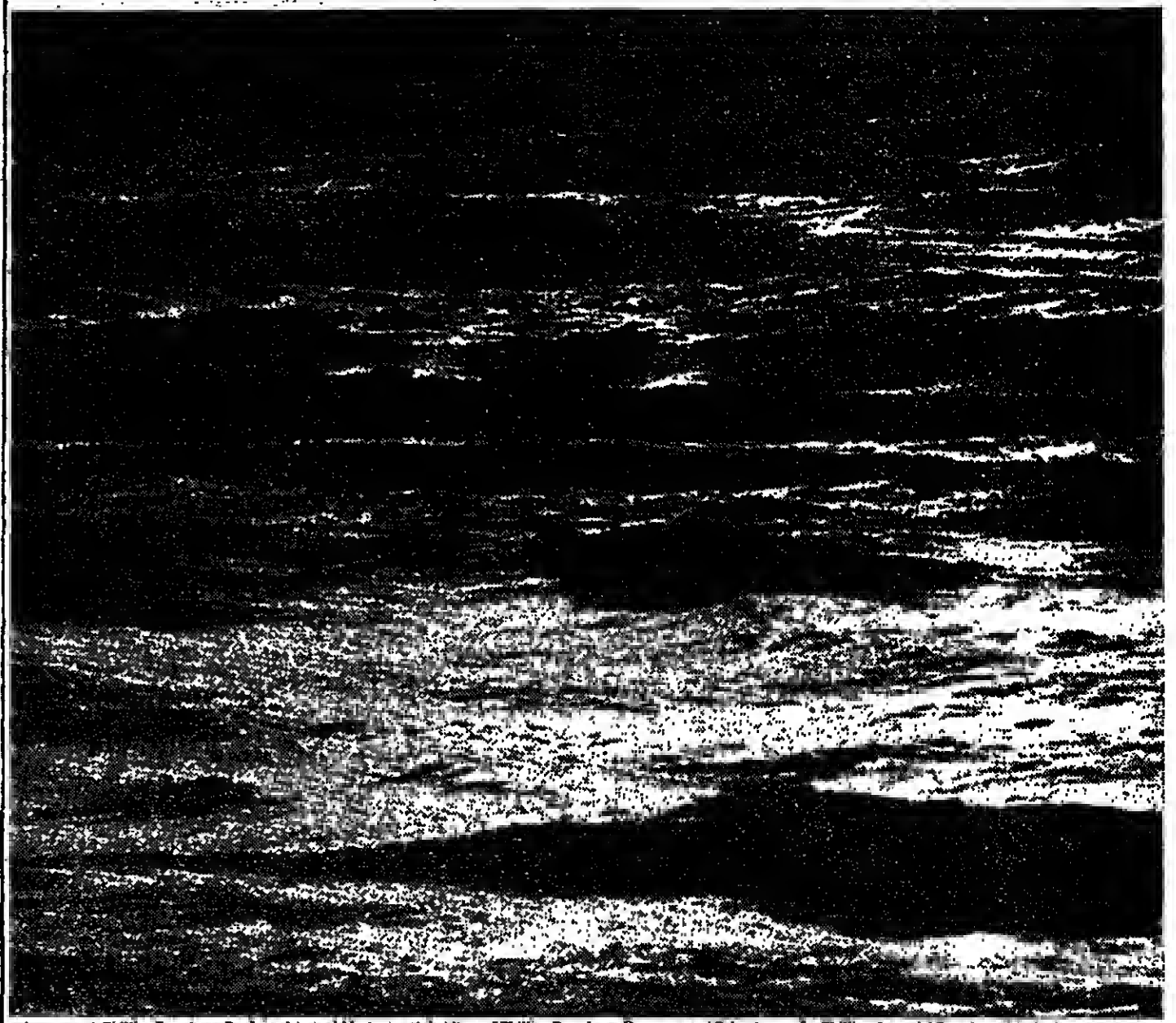
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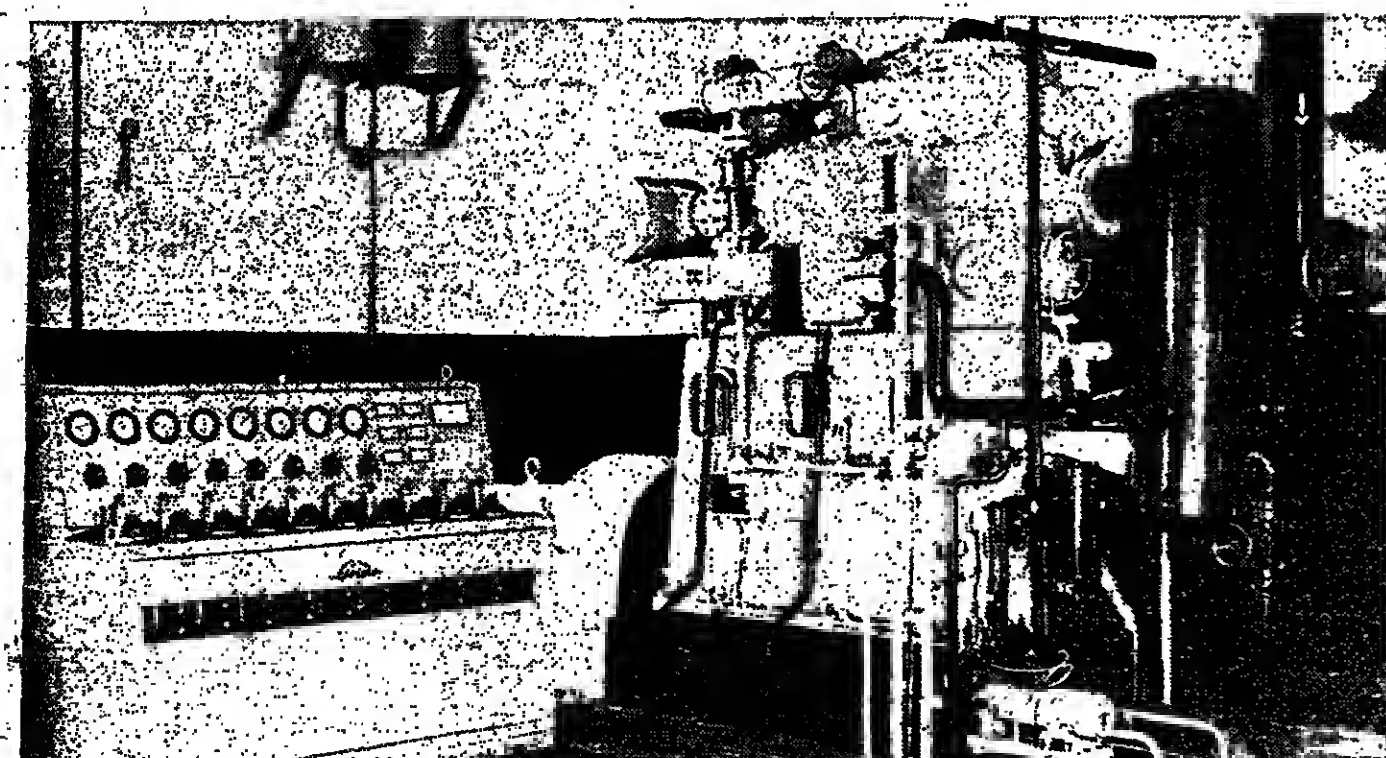
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Exports concern—(Cont'd)

Continued from previous page
his situation gives rise to few problems but when it comes to exports, manufacturers have largely been content to let the U.K.-based contractors win the orders. The incidence of direct selling to foreign process operators has therefore been comparatively low.

The opportunities for selling in this last sector are quite considerable and some efforts have been made to interest foreign contractors in U.K. plant. In 1969, the Council of British Manufacturers of Petroleum Equipment sent a team to the U.S. to estimate what potential business was available and to inform contractors over there about British hardware. This exercise, however, remains the exception rather than the rule and similar activity from other sectors of the industry could well help the process plant export drive.

One of the greatest and most natural challenges before the U.K. plant makers is the prospect of entry into the EEC, with its enormous flow of internal trade. In the opinion of the Little Neddly working party, membership of the Common Market by Britain and the gradual elimination of tariff

barriers against U.K. exports to the Community would result in a "significant improvement" in the competitive position of British manufacturers in these markets.

Business prospects for manufacturers who find themselves in a position to compete in technical terms and on their delivery performance would be very substantial and they should be able to displace out only the products of some present exporters to EEC countries but also, and probably more important, those of less competitive suppliers within the Community itself.

Tariff barriers

But, as the working party warned, other U.K. equipment makers would at the same time find themselves increasingly heretofore of the protection afforded by the present tariff barriers and faced with sharply increased competition from European manufacturers in their own home markets. There is certainly a trend towards Continental companies becoming more active in this country and this process looks more likely to grow in terms of con-

tracting work and direct selling. At the same time, however, U.K. contractors are themselves gradually growing to appreciate the importance of closer links with their Continental counterparts. Britain's importance as a world base for plant contractors is well established, primarily because of the number of oil companies with headquarters in London and also because of the ability of the City's financial network to generate capital for major projects.

It is from London then that they cast their eyes on Europe, and several U.K.-owned operations are among those who have already bought themselves stakes in foreign companies. Everyone certainly seems convinced that to obtain a slice of the potential business, there must be a system of local contracting affiliates, and failure to establish this may well mean failure abroad.

But even given valuable links with Europe, the future for British process plant equipment is far from certain. On a purely technical basis, few U.K. manufacturers spend sufficient resources on design and fabrication research to put them on a truly competitive basis with the

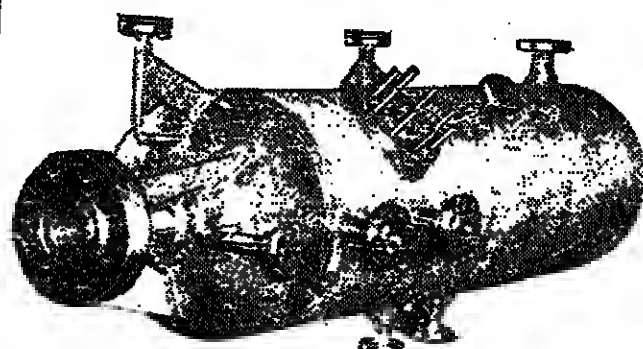
Americans and West Germans. Although some rely on licences from overseas equipment makers to stay in the technological race, U.K. manufacturers in general tend to be regarded as the producers of the well-established, stock equipment while specialist plant production is more often than not left to foreign competitors.

It is also difficult to find areas where U.K. process-plant makers are competitive on a cost basis. Hampered by supply problems, bad business and uncertain industrial relations, it is hardly surprising that the competitive edge has disappeared but there is some hope, however, that the recently announced incentives for capital goods investment might have a marked effect on the level of home demand and so provide a better base for overseas activity.

Rationalisation and diversification are currently being pursued by many manufacturers in an attempt to secure a sound future. The potential overseas, not merely in Europe, certainly exists and if competitive conditions can be improved then U.K. manufacturers and contractors should between them preserve and improve their standing as a world force in process plant.

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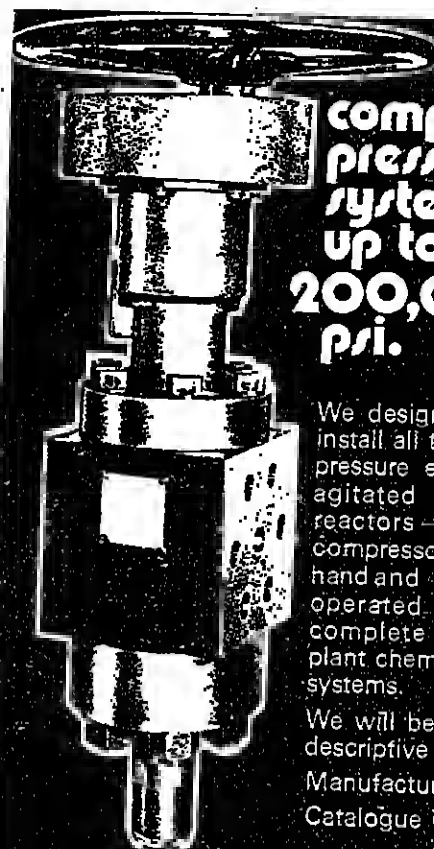


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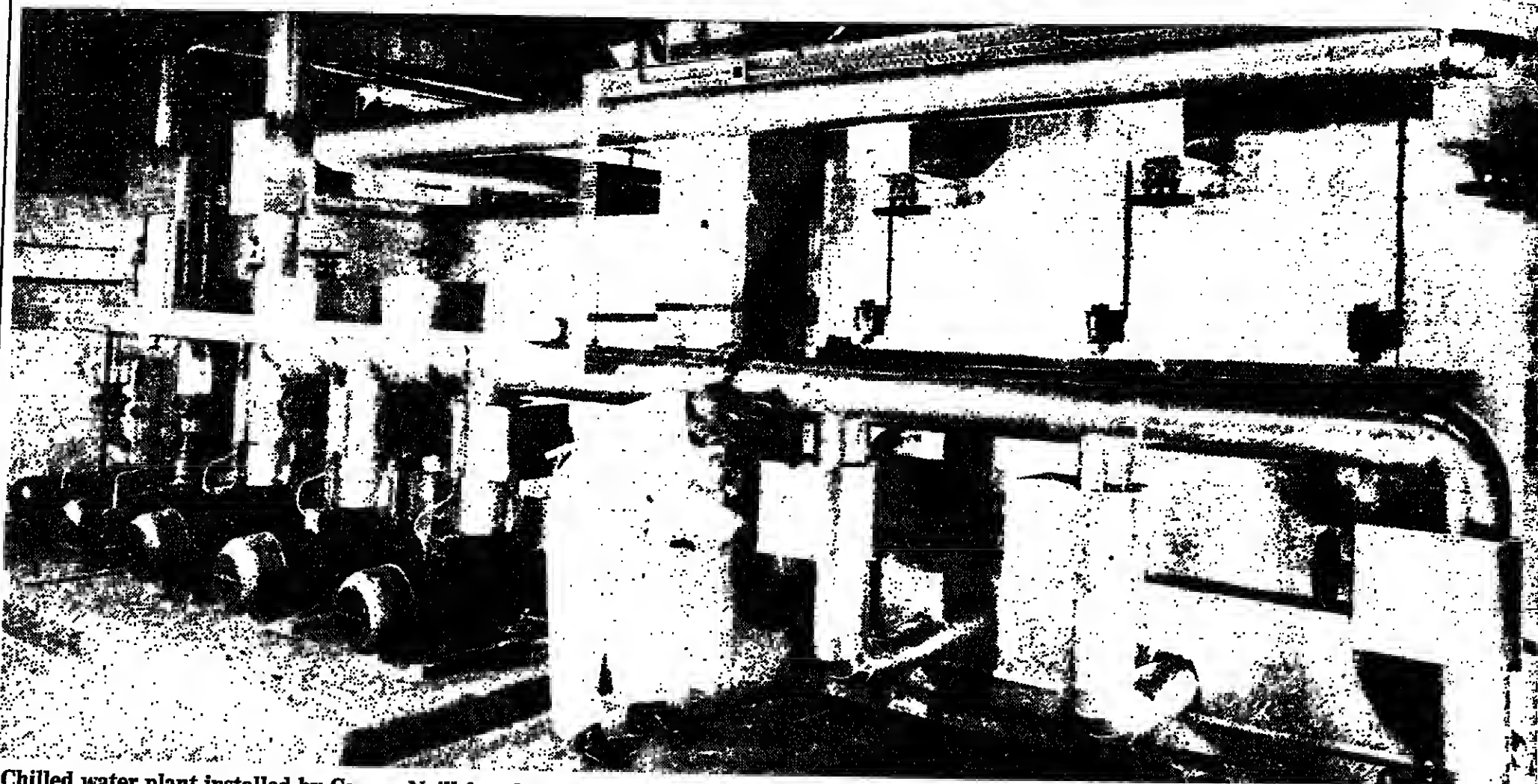
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PROCESS PLANT VIII



Chilled water plant installed by Capper-Neill for chocolate cooling at Nestles factory at Hayes.

Growing influence in food

By Dr. E. H. T. HOBLYN, Advisory Director, Process Plant Association

The processing and preservation of food has always been vital to the nation. It is now a highly technological industry; the British food industry spends in the order of £100m. annually on plant and machinery while exports from the United Kingdom of food and packaging machinery are currently running at over £40m. a year. Although temporarily on a plateau, capital expenditure by the food industry has been increasing steadily for a number of years and one reason for this has been the changing structure of the industry; many amalgamations have taken place and have provided the opportunity to scrap old plant and to rationalise production in new and very much larger units with, wherever possible, continuous plant operation coupled with mechanisation and automatic process control.

The use of process plant in the food industry is perhaps best demonstrated by considering some of the unit operations of chemical engineering such as heat transfer, evaporation, drying, mixing and filtration. Food engineering may be regarded as chemical or process engineering in a food industry context with the special reference to factors designed to preserve the flavour and appearance of the food being processed and to ensure hygienic operating conditions. Heating is probably the most important single operation carried out in food processing. It is used in pasteurising, cooking and in concentrating products to save weight and space in storage and transport. These various heating operations must not

Heating medium

The application of fundamental chemical engineering thinking has helped to solve many of the food industry's problems when dealing, for example, with heat sensitive materials. Such materials require that operating temperatures should be as low as possible or the time of contact with the heating medium should be short. These conditions have been achieved by working under vacuum and using climbing film and wiped film evaporators and one of relatively recent design which embodies highly turbulent liquid/vapour flow. These principles are applied to the concentration of milk, citrus fruit juices, tomato juice and so on; the thin film short contact time principle has also been applied to the continuous production of candy when in the sugar cooker the syrup is distributed in a thin film over the evaporating surface thus permitting flash evaporation with contact time of only six to eight seconds. The continuous processing of viscous heat sensitive materials has been simplified by using plate type or scraped tube heat exchangers which provide uniform treatment and provide for automatic process control. The canning industry also

presents some interesting heat transfer problems associated with heating the can and its contents. Methods in use include the batch retort, the continuous rotary cooker and cooler in which cans are rotated to agitate the contents and improve the heat transfer rate, and the hydrostatic continuous pressure cooker in which cans are subjected to more gradual heating and initial cooling than in a normal pressure cooker. Apart from its use on canned foods, this type of plant has also been used successfully for sterilising of milk and for the production of milk-based chocolate drinks. Heat treatment provides one method of preserving foodstuffs. Another is cold treatment and a third drying. Cold treatment can be carried out by conduction as in various designs of products, conveyor dryers for plate freezer, by convection as in blast freezers including the dryers for products such as chocolate crumb and malt extrusion in which the product is sprayed with liquid nitrogen; this provides very rapid freezing and preserves the texture and quality of sensitive products such as strawberries.

Various dryers

Other dryers in use in the food industry include ring dryers, drum dryers for flake products, conveyor dryers for vegetables, and vacuum band dryers for products such as chocolate crumb and malt extrusion. Accelerated freeze drying is valuable for costly materials

and results in a high quality product which can be easily reconstituted. Mention should also be made of mixing and filtration. Considerable study of the physical properties of materials has provided a more scientific basis for mixer design than hitherto. Indeed, it was fundamental work on these lines which led to the development of the Chorleywood mechanical dough development process and the necessary high speed mixers giving a defined work output.

Filtration is widely used across the spectrum of process industries. Membrane processes such as reverse osmosis, ultrafiltration and electrodialysis are being actively investigated for a food industry application. Finally the development of scale and sophistication of many food plants will be such that the engineering of complete installations will often call for the employment of process engineering contractors who have grown

Taken place

These are just some of the ways in which process plants use in the food industry. This influence of the process engineer will increase; less will firms regard themselves exclusively as, for example, bakery or brewery or dairy engineers. Valuable cross-fertilisation has taken place and many manufacturers will operate and think every bit as much as the fundamental operation performed by the plant as the product to be treated.

Impact on non-ferrous metal production

By P. M. J. GRAY, Power Gas Ltd.

Despite short term fluctuations frequently of disturbing magnitude the world demand for all the major non-ferrous metals show, in the long term, an inexorable potential for growth which seems unlikely to slow down. The process plant industry is, therefore, concerned more with the changing technical requirements and geographical centres than it is with any risk of diminishing or static world markets. The outlook of the industry has to be as wide as is the natural occurrence of the minerals of the metals.

Britain is, and always has been, an important centre for research and development of process metallurgical technology. The emergence of completely new process routes on an industrial scale is, however, a rare event but improvement of existing processes and equipment arising from a deeper understanding of the fundamentals of process mechanisms is continuous. The unceasing pressure of rising capital and operating costs in the operating industry applies pressure, through the process contractors, on the equipment suppliers to design and build larger sized units of greater reliability. Progress has been most marked in recent years in the building of rock moving, crushing, grinding and concentrating equipment which has, in particular, made it possible to exploit large copper ore bodies with well under the average copper content. The impact of scientific, technical and engineering advances on the metallurgical industry is much less of spectacular forward leaps than of steadily holding off the continuous pressure of inflation. The British based process industry is well equipped and backed with research to stay in the forefront of know-how suppliers.

Popular awareness of air pollution has probably done more to speed up the technical development of the copper smelting industry than any other factor.

Hydrometallurgical processes, developed for low-grade ore processing, provide more convenient ways of controlling waste disposal, so long as there are not quantities of metal and acid bearing liquors to dump in order to maintain an impurity and acid balance in a leaching and electrolysis circuit. The increasing application of solvent extraction and ion-exchange techniques for solution purification and appreciably reducing the water pollution problems associated with many hydro-metallurgical processes in the past. Contracting companies have played a major part in these developments, in collaboration with operating companies, because the processes are readily suited to laboratory scale development. Pyrometallurgical process development by contract is more expensive and greatly influenced by scale factors and commercial viability can only be proved at the industrial scale. The function of the contractor is more to act as a broker for process know-how between the operating company and those in-licensed, and those important as cost saving among tending to install new plant and

looking for know-how to buy under licence.

The rapidly increasing geographical spread of the metallurgical process industry is a factor requiring new approaches to management and financing. The traditional world trade pattern of mining and ore concentration taking place in the under-developed part of the World, and the smelting of concentrates to refined metal being conducted in the regions of the major metal markets of Europe, North America and Japan is changing. Plant complexes comprising mine, concentrator, smelter and refinery are being increasingly planned and built in the emerging countries under the financial and political control of national enterprises. Such nations have inadequate resources, as yet, of skilled manpower and money to establish these projects unaided.

Finance is sought either in the form of equity investment, free of interest, or as minority shareholdings. With potential producers planning production of refined metals well in excess of present national requirements, they also are looking for long term sales contracts and are offering these against repayment of loans.

There is rapidly developing in the U.K. a metallurgical process engineering and contracting competence for the non-ferrous industry, which, combined with the traditional financing skills of the City of London and metal trading institutions, is available to provide comprehensive services in both the design and construction of new plants and the development of appropriate financing arrangements.

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SOCIETY TO-DAY

BY JOE ROGALY

The statisticians seek safety in numbers

GOVERNMENT now has more information about the people of this country than it has at any time in the previous Administration. The quantity is increasing, the quality is improving, the results of the campaign against it have been an increase in the volume of restrictions on who may and who may not see the official statistics, especially in their raw form.

Caution

This is partly the result of an increased sense of caution in all departments of government, and most particularly in the Office of Population Censuses and Surveys, and partly the result of an observed reluctance among Ministers to agree to anything that might possibly be construed as an official invasion of privacy.

People are deeply concerned about this. The mechanisms designed to prevent the misuse of the statistics are being elaborated, but many people are still convinced that practically anyone in the Government and not a few people outside it can, by merely looking up the files, discover who has had an abortion and who has not.

The most sensitive area is perhaps the census and its concomitant social surveys. These are increasing in scope. The Family Expenditure Survey is now well established, but it has in recent years become vulnerable because officials have succumbed to the temptation to add questions on, even if some of them are only marginally related to family expenditure.

The result has been the design and production of a new continuous Government survey, the General Household Survey, which has just completed its

first year of work with some 15,000 in-depth interviews, each containing a possible maximum of 50 questions about education, housing, health, income, and a good deal else.

The answers are in, but they are being checked, and then they will be analysed, and then processed, and the tables that are published will tell only as much as that process allows. The survey, meanwhile, is continuing (it is permanent) and this amount of information, raw and cooked, in the Government's hands is thus still increasing.

This is only one of several surveys, and one of dozens of methods of collecting information about us. It is small compared with its counterparts in some other countries: in Canada, for example, some 30,000 households a month are visited by interviewers from "Statistics Canada". In America the Current Population Survey covers just under a tenth of all households every month; in West Germany a 1 per cent sample is interviewed every April, supplemented by a 0.1 per cent sample three times a year. British statisticians would like the General Household Survey to be similarly extensive.

Such alarm

It might be said, therefore, that the GHS is at least one survey which is comparatively harmless. Yet it is no more harmless than the census itself. The danger lies in identification of the respondents, and the possibility that this might happen is viewed with such alarm by the officials who manage the survey that they will not show the completed forms to other



April: Young Liberals in Trafalgar Square setting fire to their census forms. Some officials are now questioning whether names and addresses are really essential on all forms.

officials, let alone outside academics.

This is where the absurdity is most noticeable. The best academic (and, for that matter, departmental) work can be done with the products of surveys of this kind only when the completed questionnaires themselves are available. With them, it is possible to look for patterns in the responses that computers, untrained, cannot otherwise reveal. Without the forms, the use of the statistics is confined to the use that can be made of the tables put out by officials, who are thus imposing their own patterns beforehand. What should be independent research becomes official research.

The nervousness engendered by the census is such that what was previously a simple reluctance to release raw data even

with the names obliterated, is now very close to a downright refusal to release any unprocessed figures in any circumstances.

But there are other absurdities. A great deal of information collected laboriously by the social survey and other means is available from the Inland Revenue which, because of its historical preoccupation with confidentiality, is reluctant to part with it. Many statistics could be created out of what is already collected in the ordinary way by local and regional authorities, if a system of cross-linkage could be devised; here again, the preoccupation with privacy is an obstacle.

For example, it would be possible (and indeed has already been proved so on a small scale) to keep a central register of the medical case histories of

everyone in the country. The results of every visit to a doctor or hospital would be fed in, and the central register, cross-filing and cross-checking included, would do the rest. This would clearly be of help to doctors and hence to patients, but the political outcry against it can be imagined.

Advantages

Personally, I must confess to being in two minds about the best solution. There is little doubt that even with the statistics we have, some Government officials are likely to shush their powers—equally, in the present situation, the amount of abuse of this kind is unlikely to outweigh the considerable advantages of having the planners, with whom we are apparently stuck, know what

they are talking about. This must surely lead to the conclusion that there is really little harm in allowing the Government to go on tabulating facts about the people and that there may be some good in it.

The main force of the opposite argument lies in what the threat may be in the future. A totalitarian government would certainly find its work facilitated if the files on every member of the population were found to be conveniently full at the time of take-over—and, even short of such an unlikely development, a tough-minded "democratic" government might use information on, say, coloured immigrants against them.

Safeguards

Any government that hopes to expand its statistical services in this direction should first design a set of safeguards that the public would come to know and accept. There is already a great deal of discussion about a code of conduct for interviewers and tabulators, to be signed and sworn to. Some officials are questioning whether names and addresses are really essential on all forms; surely as many as possible could be completed anonymously. The burning of long-past records, publicly, is another possible way of increasing confidence.

None of these will suffice while the compilers of statistics continue to be so secretive about their methods and their purposes. It is one thing—and, indeed, most proper—to refuse to disclose the name of an informant; it is quite another to apply the Official Secrets Act to the purpose of a questionnaire, or to its results. When government becomes more open, perhaps the public will respond in kind: meanwhile the absurdities will continue to multiply.

Labour News

Shawcross to hear BSA union plans

BY PETER CARTWRIGHT, MIDLANDS CORRESPONDENT

UNION proposals to save off a worst effect of the crisis in the BSA, the Birmingham motorcycle manufacturers, are being put to-day to Lord Shawcross, a director and chairman of the company, by Sir John Edan, Minister for Industry, in fulfilment of a promise made to union officials at a meeting last Friday. The full extent of BSA's acute financial problems will become clear to-morrow, when the statement, expected to show losses of £10m or more will become available. The first of the companies' intentions to keep the company afloat is also being made known. The company plans to sell cars in Sealed Motor Construction for around £2.1m, to try to raise a total of £2.1m. The statement, which union officers are overheard of £10m, is being

Concorde price expected to be set within next three months

BY MICHAEL DONNE, AEROSPACE CORRESPONDENT

IT IS HOPED that the manufacturers of Concorde will give firm specifications on the aircraft to the airlines in the next two to three months. Mr. Frederick Corfield, Aviation Supply Minister, told the Commons yesterday. He said he was in touch with the French Minister of Transport, M. Champan, about the Ministerial meeting on the programme, which would probably take place in November, or at least before the end of the year.

Answering questions about the progress of the project, he said the first of the two "pre-production" Concorde was expected to fly (in early December) from the British Aircraft Corporation's works at Filton. Flight trials of the two prototype had been made to make a satisfactory progress.

This price is now expected to be in the region of \$28m (over £11.5m) per aircraft.

Mr. Corfield was also asked if he would now try to persuade British European Airways to place an order for the U.S. Lockheed TriStar aircraft, or at least make a declaration of intent.

Mr. Corfield declined, however, saying: "It is not up to me to bring pressure on BEA."

He told MPs that funds were available for the RB-211 engine for the TriStar to go ahead. "By September 14, all the pre-conditions had been met for the continuation of the RB-211 programme for the TriStar. The selling price of the Concorde to Rolls-Royce/Lockheed contract for the engine, and the Government's undertaking to finance the RB-211 programme, accordingly took effect."

Unions in joint move at Boots

THE Association of Scientific, Technical and Managerial Staffs and the staff section of the Union of Shop, Distributive and Allied Workers have decided to pool resources for a joint campaign to recruit from more than 1,000 staff workers at the Boots group.

The area organiser for USDAW, Mr. Mike Hill, said that Boots was the only major company in the Nottingham area where clerical staff were not unionised.

Satellite launch Thursday

BY MICHAEL DONNE, AEROSPACE CORRESPONDENT

THE LAUNCH of Britain's first scientific experiment to measure technological satellite, Prospero, the incidence of micro-meteoroids, from the Woomera, Australia, which can cause damage to spacecraft, is now expected to take place on Thursday instead of today.

This will be the last launch using the Black Arrow vehicle, following the recently-announced decision that this national Black Arrow launch vehicle programme is to be terminated as part of the equipment for future space realignment of the National Space Technology Programme.

Coventry toolroom men still adamant

BY PETER CARTWRIGHT, MIDLANDS CORRESPONDENT

SUPPORT among more than 100 toolroom workers here in a fight against engineering employers who want to introduce a new system of piecework, is still strong. The workers' union, the Coventry Toolroom Association, is adamant that the employers' offer of a 10 per cent increase in the last paid August rate to bring them to 103.48p an hour in November and 104.39p in December if they will negotiate further rates at factory level instead of across the Board. The offer was made during a five-hour meeting with the district committee last Wednesday, when a document of proposals for implementing bargaining was also presented. The district committee rejected the offer outright when it met on Saturday, and to-night the toolroom stewards were deciding whether to accept the committee's decision over the future course of the dispute. Chrysler was again worst hit by to-day's strike, with 6,500 laid off at Coventry and 1,500 more at the associated Linwood plant in Scotland. At Jaguar cars 176 at its Radford (Coventry) works were being worked because machines could not be repaired.

Man-made fibres output decline halted

BY JOHN TRAFFORD

FIGURES for this production of man-made fibres in September, just released by the British Man-made Fibres Federation, show that the decline apparent during the summer has been halted. As yet, however, there is no sign of an upturn.

September production was 112,066m. lbs. compared with 112,356m. lbs. last year. This nine month cumulative figure was 1,010m. lbs. an advance of 1.6 per cent. At the six-month stage, the growth had been 2.7 per cent, and for the year's first quarter it was 7.1 per cent. The recent disappointing performance will make it hard for the industry to establish a new record this year for total output much above the record level reached in 1970.

Like the summer months, the total for September declines, but continuing strong swing away from spun yarns and to filament yarns, widely used in knitted fabrics which are still making inroads into the woven cloth market.

All the growth this year has been in filament yarns where output during the first nine

Atlantic fares package hopes

By Our Own Correspondent

GENEVA, Oct. 25.

REASONABLY good chances of agreement on a North Atlantic fares package can be predicted as airlines representatives gather in Lausanne for a renewed attempt to avert the "open rate" situation which otherwise will come into effect on February 1.

A spokesman for the International Air Transport Association noted to-day that every member airline, including Lufthansa, would like to see an agreement.

Senior commercial executives of the airlines will meet for two days, starting to-morrow, to thrash out agreement on overall policy to be worked into a fares package. If this is achieved, formal negotiations can start on Thursday and may last into early next week. It seems clear that the Montreal "package" will be used as a basis for the talks, although the fare offering is likely to be considerably simplified.

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Union's girl employees strike over redundancy

BY OUR OWN CORRESPONDENT

TWO GIRLS belonging to the offices in Manchester were on strike in sympathy. This followed a strike by three girls at Preston, Barrow and Chester offices of the ASWPB being declared redundant because these offices were to close. Later, Mrs. Pat Wheatley, a shop steward in Manchester, denied that the dispute there was connected with the redundancy. She said: "It was purely about pay, and this has been cleared up. The redundancy in other offices did not come into it."

Mr. Eric Hughes, ASWPB regional secretary of woodworkers, which employs the girls as telephonists, typists and secretaries, said: "The girls are getting 124 per cent, backdated to May."

More labour news on Page 30

Saleroom Paintings fetch £61,385

A STILL-LIFE of flowers by Paul Theodore van Brussel went for £12,500 to Leggett at Phillips' sale of paintings yesterday. The total was £61,385.

Patterson gave £4,000, £2,800 and £1,000 respectively for three river scenes by Hermann Kueck, a private buyer £2,000 for A Political Discussion by Francis Brunery, and Western £1,600 for The Lane Kim of Beccles, along with Entrance to Oulton Dyke by L. Stark. A chancel view by L. Bakhuizen went for £1,900 to Drown, a seascape in the style of Dodo for £1,600 to Brantling, a marine scene by Johannes Hermann Koekkoek for £1,500 to Allen; a

enow scene by Thomas Smythe printed books which realised £10,261. Hammond gave £1,350 for Horus Sanctus, Strasbourg, 1497. Revell's Selenographia for 1647, Mercurius in Sole 1661, and Epistola II 1684, in one volume, went to Dawson for £480, a first edition of Darwin's On the Origin of Species 1859, the Whalton and Westley for £400 and Eastington's Pyrotechnia 1635 to Edwards for £280.

Sotheby's afternoon sale of antiquities realised £8,206. In a £12,691 sale of English porcelain at Christie's a Darby Doughty plaque painted by J. Rouse junior, was sold for £600 and a pair of Bow "birds in branches" candlestick groups for 240 gns, both lots to Grosvenor Antiques.

COMPANY NEWS + COMMENT

Lankro first half profit downturn

IN the half year to August 31, 1971, pre-tax profits of the Lankro Chemicals Group fell from £413,000 to £332,000.

Even in present market conditions, says the Board, profits for the second half should be no less than those earned in the first half, and it is the prime objective, without relying on general economic improvements, to halt and reverse the recent unfavourable movements in the group's cost-price relationships.

For the year to February 28, 1971, pre-tax profits were £347,000. The interim dividend is held at 5 per cent last year's total was 20 per cent.

	1971	1970
Turnover	1,000	7,300
Depreciation	100	100
Investment charges	100	100
Profit before tax	100	100
Tax	100	100
Net profit	100	100
Interim dividend	100	100

The half-year results were, to an extent, anticipated in the annual report, and directors believe the increase of 11 per cent in group turnover achieved during a period of flat national economy would, in normal circumstances, be satisfactory.

However, in the face of a second quarter decline in European prices affecting the group's sector of the chemical industry, the growth in available margin was insufficient to match the rate of cost increase experienced over the past 12 months. The group has adequate capacity in all major product areas to take full advantage of such further growth as may result from the recent fiscal measures taken by the Government.

Lankro's new polyester plant in Eccles came into operation successfully, and on schedule, in September. The products deriving from this plant will "significantly expand" the service to the textile industry.

Burts and Harvey's agricultural chemical plant is now fully operational, and the exceptional revenue associated with bringing it to that point has ceased, but has, together with seasonal factors, led to the company producing a small net loss at the half-year mark.

The directors have "every hope" that this company will return to profitability during the second half of this year.

Associated companies have continued to show good growth during the period, and the Indian associate is now operating profitably.

comment

The 20 per cent drop in Lankro Chemicals' first half pre-tax profits is the result of price competition not matching the group's raw material suppliers—particularly in the second quarter where Lankro cut prices in order to hold customers and to penetrate the European market. Complicating this, the group's chief suppliers are ICI and Shell who are also its major competitors. A further aggravation is the general flatness of the detergent and agricultural markets. No immediate improvement is on the cards, but with a turnaround in the U.K. economy expected by 1972, Lankro and investment in Burts and Harvey should be in a position to take advantage of this.

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However this is little consolation for the shares which fell 22p to 172p yesterday to give a p/e of 21 on fully diluted prospective earnings of 8.2p a share (from doubled first half profits).

Redifusion Television prospects

IN SPITE of the loss of rental income from St. Catherine's House, the directors of Redifusion Television expect current-year profits to be "not likely to be much below" those for the year to July 23, 1971.

This is subject to the present trading position of Thames Television not being adversely affected during the remainder of the year.

As reported on October 20 group pre-tax profit for the past year expanded from £1,023,784 to £2,287,082, reflecting an upsurge in profit of Thames Television.

The Ordinary dividend is stepped up from 6½ to 20 per cent and the Preferred Ordinary from 6½ to 8½ per cent.

Turnover from leasing of properties was £390,000 (£322,000) and pre-tax profit from that source was £204,000 (£228,000). Turnover from the sale of programmes and films was £16,000 (£19,000) and profit £3,000 (£16,000). The share of profit from TTV was £1,823,000 (£383,000) and investment and other income amounted to £278,000 (£283,000).

In the 1967-68 report an explanation was given of the arrangements which, to meet the desires of the Independent Television Authority, had been made concerning the control of Thames Television. It is now over 2½ years since the ITA decision was made public, but the arrangements still have not been put into effect. It is pointed out that there now remains less than three years of the six-year contract granted by the ITA to Thames Television.

Consequently, control of TTV remains in the hands of EMI, while Redifusion continues to hold 50 per cent of the shares and to contribute 50 per cent of the investment.

The scheme for the internal modernisation of the company's premises, St. Catherine's House, which is being financed by the company at an estimated cost of £1.5m., is progressing satisfactorily. The company suffering a considerable loss of rental income during the period of

the scheme, but the arrangements, whereby IPC will take up an underlease of the premises upon completion, and in any event not later than June 1972, will result in the company obtaining a substantial profit rental from June, 1972 onwards.

The ultimate holding company of Redifusion TV is British Electric Traction, which is the beneficial owner of 170,000 Ordinary, 2,380,000 Non-Voting "A" Ordinary and 85,000 Non-Voting Participating Preferred Ordinary. Redifusion Limited, a subsidiary of British Electric Traction, holds 127,848 Ordinary and 1,780,659 Non-Voting "A".

Meeting, Stratton House, Piccadilly, W., November 16 at 10.30 a.m.

Post strike hits Reed Executive

AN interim dividend of 20 per cent is declared by employment agents Reed Executive and directors repeat their January prospectus forecast of a 35 per cent final to make 55 per cent for 1971.

First half pre-tax profit—fell to £33,184 from £37,489, reflecting the effects of the recent strike, which is estimated to have cost the group in excess of £60,000.

After tax of £38,200 (£58,146) the net profit was £44,984 against £79,848.

For all of 1970, there was a group pre-tax profit of £319,626. The chairman, Mr. A. E. Reed, has waived the dividend on 1,134,500 shares and his family trusts have waived entitlement to 50 per cent of the dividend due on 925,900 shares.

comment

The postal strike has had a predictable depressing effect on Reed Executive's first-half results, but there seems to have been no growth anyway even after adding back the exceptional costs involved here. This is because of sizeable starting-up costs resulting from the 21 branch openings in the period. But since new units take some months to get into their stride the second half of 1971 should benefit correspondingly. Thus, even though the temporary market is still dull, Mr. Hamilton reported some success in both home and export trades in the new units.

In the new furnished warehousing for finished goods would have to be extended and the necessary land adjacent to the building had been acquired, he said. More wide Alexander looms and tufting plant would be needed to meet the anticipated increase in the demand for group products.

Mr. Hamilton reported some success in both home and export trades in the new units. A recent visit to Canada confirmed that business in the plant was improving but with the dollar crisis "one could not be too optimistic" as the Canadian factory did a big business with the U.S. "If Britain entered the EEC, that factory would benefit because, presumably, British makers would lose Imperial preference."

Results for the full year (excluding the substantial losses in Harrison, BTA and Cardinal) are expected to show approximately break-even position.

Despite the disappointing year, the group is in a position to take full advantage of the reflation of the engineering industry when it begins. Plans are being prepared to plant and buildings over the next two to three years which will lead to a significant improvement in efficiency.

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Portsmouth Sunderland profit up

FIRST-HALF group profit of Portsmouth Sunderland Newspapers has increased from £252,300 to £283,500. The net figure came out at £174,000, against £141,500, after tax of £109,500 (£111,000).

An unchanged interim dividend of 125p per 25p unit has already been declared. The total for the year to March 31, 1971, is 25p from a pre-tax profit of £465,100.

comment

After a 28 per cent pre-tax jump in the first half of 1970-71, Portsmouth and Sunderland's growth rate slowed to 2 per cent in the second, leaving profits still a long way short of the recovery. The group returned £529,000 before tax in 1969-70. However, a pre-tax rise of 12 per cent in the first half of the current year shows the group to be on its way once again though how far this recovery trend will continue is not yet clear. Advertising revenue is currently at a low level for classified display, but margins are still under heavy pressure (particularly from wages). Moreover, there is a further newspaper price rise falling in the current half. The group's growth prospects are clarified an historic p/e of 11.7 at 76p seems high enough.

Increasing demand at BMK

THE KILMARNOCK carpet factory of Blackwood Morton and Sons (Holdings) was busy at present, Mr. K. M. Hamilton, chairman, told shareholders at the annual meeting yesterday.

In the new furnished warehousing for finished goods would have to be extended and the necessary land adjacent to the building had been acquired, he said. More wide Alexander looms and tufting plant would be needed to meet the anticipated increase in the demand for group products.

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Mr. Irvin Haylock (

INTERNATIONAL COMPANY NEWS + EURO MARKETS

Daimler-Benz to put 6,000 men on short time work

BY CHRISTOPHER LORENZ

DAIMLER-BENZ, West Germany's leading commercial vehicles manufacturer, is to put 6,000 employees on short time, at least until the end of the year. Those affected will work at the company's 8,500 strong plant at Gaggenau, near Karlsruhe.

Gaggenau, one of Daimler-Benz's five commercial vehicles factories, produces the Unimog transporter, as well as engines and axles for heavy lorries and transmissions for all types of commercial transport.

The company says it has been forced to make this move, partly because of export problems in the wake of the currency crisis and partly as a consequence of the situation in the German civil engineering industry. In this sector the government has cut on expenditure have been felt keenly, with the result that orders for new earthmoving and construction equipment have been falling.

Kloenker-Humboldt, Daimler-Benz's chief competitor in the heavy lorry field, introduced short time last month for almost half of its 10,000 workers at its factory in Ulm. It cited the same problems as Daimler-Benz is now experiencing, but its measures have been far more drastic. The Ulm employees are now working only three weeks out of every four, while Daimler-Benz intends to miss only two days next month and seven or eight in December.

Whether short time will continue into the New Year is not yet officially clear, but it seems likely. Daimler-Benz insists that its move should not be taken too dramatically, pointing out that other firms are working normally. It also stresses that the problems with commercial vehicles have nothing to do with car production.

On the car front, however,

prospects are also dimming. The Automobile Industry Association reports that in the first half of this year gross earnings per unit within the industry as a whole were a third lower than the same period last year. A rise in sales value of DM3,100m. was more than offset by an increase in production costs of DM3,400m. The association reckons that the rise in sales value will be greater than the growth in turnover.

Life Savers raises bid in struggle for Stedman

BY MICHAEL SOUTHERN, AUSTRALIA EDITOR

LIFE SAVERS (Australia), a leading confectionery maker here, has made a strong counter-attack in the take-over battle for James Stedman with a new cash-offer worth about \$4.5m.

The company announced yesterday that it was raising its bid to the equivalent of about \$4.74 for each Stedman Ordinary share, compared with its previous bid which had been worth \$4.28 when it was first disclosed on September 23.

The new offer is seven Life Savers shares plus \$4.15 cash for every ten Ordinary 50c shares in Stedman. The bid for Stedman Preference shares remains at \$4.15 each.

The terms are clearly better than the \$4.50 cash offer announced on October 11 by the U.K.-based Rowntree-Mackintosh group, which wants to merge its Australian activities with those of Stedman so as to gain a 20 per cent. penetration of the expanding local market for confectionery.

The picture may have changed by the end of the year, for on the one hand most manufacturers have increased their domestic prices, and some of their export prices, while on the other hand the progressively higher de facto revaluation of the D-Mark will take its toll on export prices. Meanwhile the industry is facing a considerable increase in domestic orders of over 10 per cent.

Tiger Balm sale rumours halt trading in Haw Par

BY OUR OWN CORRESPONDENT

TRADING was suspended on the morning paper's story. Trading was brisk in Haw Par shares, and its price rose 14 cents to close at \$3.58.

The company is Haw Par Brothers International. The suspension in trading was requested by the company itself on the grounds that a Press report this morning in a local newspaper had given a misleading impression that Haw Par had sold one of its main assets. In fact, the company had just concluded a licensing agreement for the manufacturing and marketing of its famous Tiger Balm brand of medicinal products.

Trading in Haw Par shares resumed in the afternoon, however, after the only Singapore evening paper had corrected the

Supertest's shareholders may fight BP Canada's bid

BY OUR OWN CORRESPONDENT

TORONTO, Oct. 25.

A DECISION is expected to be made early this week on whether there will be a major proxy fight by holders of the ordinary shares of Supertest Petroleum of Canada against the company's proposed merger with BP Canada.

The reorganisation requires the approval of 75 per cent. of shares represented at the meeting. While it is not believed the Ordinary shareholders' committee has sufficient shares yet to be assured of blocking the reorganisation, it is thought that they are close enough to representing 25 per cent. to mount a considerable pressure on the companies.

Under the terms of the merger agreement, BP Canada, a wholly-owned subsidiary of British Petroleum of London, would buy the Supertest common voting shares at \$16.50 a share. Holders of the Common and Ordinary shares will be asked at a meeting on November 2 to vote on a plan

to reorganise their shares into a new class of Common stock on the basis of one new Common for each two existing Common, and five new Common shares for each existing Ordinary share.

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CEDEL/EURO-CLEAR "AGREEMENT" Need to clear the air

BY WILLIAM LOW

THIS WEEK should see the implementation of an effective link between the Eurobond market's two clearing systems—CEDEL and Euro-clear.

Thursday at the latest, transactions between participants of the respective systems will be settled on the basis of payment in New York the day after bonds are delivered by one system to the other in Luxembourg.

Inter-system transfers, however, should have started on October 1, according to an agreement signed by both parties on September 21. Before going into the reasons why this schedule could not be maintained, it is necessary to describe the series of events leading up to the so-called "working agreement".

In late 1968, Morgan Guaranty Trust Company of New York, formed in Brussels an operation—Euro-clear—specifically designed to provide a centralised system for settling debt registered in the location of the buyer and seller. The advantages of Euro-clear were obvious and it soon attracted a large clientele.

However, a group of Continental banks, especially those based in Luxembourg, felt that it was wrong for one bank to handle settlement transactions on behalf of the market and so set up last year a co-operative type clearing system called CEDEL.

The existence of two rival clearing groups worried many members of the market's self-regulating body, the AIBD, accordingly, at its annual meeting in Paris last April, the AIBD called upon CEDEL and Euro-clear to negotiate a "bridge" to enable settlements between members of the two systems to be effected as cheaply, smoothly and easily as settlements within one system.

A series of secret meetings between the two systems, with the AIBD Executive Committee acting as mediator, took place during the summer, culminating in the signing of an agreement last month.

So why then was the agreement not in operation on October 1? According to a state-

ment by CEDEL, Euro-clear simply refused to implement the agreement.

Euro-clear, however, maintains that matters are not so clear-cut. James Chandler, Morgan Guaranty vice-president who is responsible for Euro-clear, has supplied the FINANCIAL TIMES with a detailed explanation of reasons why Euro-clear could not go ahead on October 1.

During the meeting which resulted in the signing of the working agreement on September 21, it was the clear understanding between the participants at that meeting that in the interests of users of both systems the terms of the agreement signed must be subject to review by and agreement of the legal advisers of each system. During this and

previous meetings, we and CEDEL had agreed that questions relevant to both credit and insurance risks must be satisfied, particularly in view of CEDEL's structure, which, not being a bank, as they pointed out on several occasions, would require some clarification.

On September 23, Chandler claims, Euro-clear called CEDEL to cover a proposed conditional clause which could provide safeguards against the risk of insolvency of one bank to handle settlement transactions on behalf of the market and so set up last year a co-operative type clearing system called CEDEL.

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IN BRIEF

Europe

● **BAUQUE DE L'UNION EUROPEENNE** (BUE), subsidiary of Cie Financiere de l'Union Europeenne, Schneider group holding company, confirmed reports it would take 33 per cent. stake in German bank, Buegard and Brockelmann. BUE said it also acquired 25 per cent. of Francofinancie Betzweg, which controls Baouque Franco Allemande, of Paris.

● **PFIZER** plans to acquire "a major interest" in Mack Illustrators, West Germany, for a number of Pfizer shares, estimated at about 1.4m. The interest will be over 50 per cent. Mack Illustrators, located near Ulm, markets pharmaceutical products, primarily in Germany. Its principal items are cough and cold products and other medicinal products.

● **CIE BANCAIRE** group first half profit before tax and depreciation rose to £1.23m. compared with £1.04m. in first half last year. Results for year as a whole will certainly show a considerable

North America

increase over last year, when the group made gross profit of £2.39m., said the company. Parent company profit before tax and depreciation advanced to £2.39m. in first six months from £1.81m. in the same period of 1970.

● **MOBIL OIL FRANCE**, subsidiary of Mobil Oil Corp., of the U.S., said first half provisional net profit rose to £2.15m. from £1.14m. in same period last year.

● **STANDARD OIL COMPANY OF INDIANA** nine month net earnings rose to \$27.4m. (equal to \$3.30 per share) from \$24.7m. in same period last year. Official indications are not available whether dividends covered are interim or final and the subdivision shown below is based mainly on last year's figures.

Others

● **MYER EMPORIUM** said in Melbourne that net profit rose to \$416m. in year ended July 31 from \$315m. on sales increased to \$447m. from \$420m. Company expects earnings to continue rising despite increasing costs.

● **ALUMINUM CO. OF AMERICA** (Alcoa) estimates that capital expenditures for the years 1971 and 1972 will approximate \$367m., down 30 per cent. from 1969 and 1970. Spending will go primarily toward modernisation of facilities.

● **ROYAL TRUST**, largest trust company in Canada, had operating profit of \$7.1m. or \$1.50 a share, against \$6.5m. or \$1.30 a share, in 1970. Consolidated assets at September 30 were \$1,835m., up \$236m. from a year earlier.

● **NORTHEAST EXPLORATION**, of Toronto, has agreed to sell its 22 per cent. interest in Western Mines, a British Columbia copper producer, to W. R. Grace and Co., of New York, for \$100,000,000, on common shares valued at about \$2.50. Depending on certain conditions, Grace could also pay up to 20,000 additional shares.

● **CHRYSLER** CORPORATION today reported record sales of \$1,900m. in the third quarter and profit that was more than doubled from \$1.1m. (5 cents a share) to \$2.2m. (12 cents a share). But the company also said that its cost of labour and materials had increased after the end of the Nixon price freeze.

Chrysler stated that it was in basic agreement with the Administration's objectives of controlling inflation and had supported the 90-day freeze with a 100 per cent. roll-back of its scheduled 1972 price increases. But it added that though it would continue to support the President in the second phase of his programme, the price roll-back would mean that it would not be able to recover any of the increased costs associated with production in 1972.

COMPANY NEWS

Extra 2% from Pontin's: profit up £225,000

ON A PROFIT increased from £2,033,000 to £2,278,000 Pontin's is raising its dividend from 12 to 14 per cent. with a final of 10 per cent. for the year to April 30, 1971.

Preliminary figures for the season just ended indicate that, in spite of the postal strike, profits are in excess of those of the previous year, the directors state. The interim dividend for the current year is stepped up from 8 to 7 per cent.

The past year's profit includes interest on short-term loans of £55,041 (£54,491) and is subject to tax of £202,000 (£201,782). The profit also includes commission of £50,000 waived by the chairman and managing director, Mr. F. Pontin.

The purchase price of Seacroft Holiday Camp, already reported, is to be met from the company's existing facilities, it is stated.

See Lex

Trident TV growth

The first annual report of Trident Television for a year to May 31, 1971, gives a breakdown of the £17.5m. turnover showing that revenue from advertising, less discounts and commission, amounted to £14.7m., before deduction of £2.13m. Executive levy.

The comparable figures for Yorkshire TV and Tyne Tees TV combined in the previous year, before the levy was cut, showed a smaller revenue, £13.06m., and a larger levy payment, £3.04m.

The balance of turnover was

BOARD MEETINGS

The following companies have notified dates of Board meetings in the Stock Exchange. Such meetings are usually held for the purpose of considering dividends. Official indications are not available whether dividends covered are interim or final and the subdivision shown below is based mainly on last year's figures.

70-71		71-72	
Group Profit	1970-71	1971-72	1970-71
Dividends	1970-71	1971-72	1970-71
Forward	1970-71	1971-72	1970-71
Including 20,000 (same) shares	1970-71	1971-72	1970-71
waved by the chairman	1970-71	1971-72	1970-71
and managing director	1970-71	1971-72	1970-71
at September 30	1970-71	1971-72	1970-71
The purchase price of Seacroft	1970-71	1971-72	1970-71
Holiday Camp, already reported,	1970-71	1971-72	1970-71
is to be met from the company's	1970-71	1971-72	1970-71
existing facilities, it is stated.	1970-71	1971-72	1970-71

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The balance of turnover was

1970-71. "I shall be disappointed if we do not clearly demonstrate the further growth of which I believe Trident is capable," he says.

Meeting, Hyde Park Hotel, S.W., November 16, noon.

Pressac looks for sustained expansion

DIRECTORS of electro-mechanical component manufacturers and precision engineers, Pressac Holdings, look forward to sustained growth, says the chairman, Mr. G. W. Clark, at the annual meeting.

The progression maintained by all three subsidiaries throughout 1970-71 was the result of the additional capacity in which the company has invested. It is the intention to pursue the policy of reinvestment in development and production facilities to meet the ever-growing demand and to improve still further processes and efficiency within the factories.

As reported on October 15, the group's pre-tax profit for the year to July 31, 1971, increased from £215,233 to £311,584, the dividend is raised 11 per cent. to 46 per cent. and a one-for-two scrip issue is proposed.

Of the sales and profit, Pressac contributed £137m. and £210,044 and Vaxstaff and Appleton and K&S Engineering (Stafford), £335,300 and £292,940. Group sales at £1,651,600 represented an increase of 29 per cent. The profit rate increased to a greater extent, despite considerable increases in costs being absorbed. This was the result not only of the higher production but also reflected the economy afforded by improved methods and efficiency planned and built in during the past two years.

Meeting, Nottingham, November 18 at noon.

Pre-tax profit of Hamilton Leasing rose 41 per cent. from £339,514 to £489,256 (compared with the forecast of £475,000).

Chairman Mr. David M. Young forecasts an increase of "a similar proportion" for the current 12 months.

Turnover expanded by some £2.2m. to £8.69m. It comprised: receivable under leasing contracts entered into during year £2,229,665 (£1,713,143), short-term rentals receivable £199,714 (£136,101), secondary period rentals £1,604,684 (£1,457,282) and maintenance of vending machines £153,822 (£10,282).

Following agreement on the assessment of corporation tax, the provision of £48,150 made for the year 1969-70 had been released to profit. As a result, the net profit was lifted from £290,394 to £339,514.

A proposed final dividend of 7 per cent. giving a total of 22 per cent. against 1970, and a one-for-five scrip issue is also proposed.

Mr. Young recalls his reference a year ago to the strengthening of the marketing division and the expansion of the branch office structure and says the results may be judged by the purchases of £2.2m. in the year, which increased in the year to 33 per cent. compared with 1970.

Furthermore, it confirms his confidence in future growth, as this rate of expansion has been carried forward into the current year and this at a time of virtual stagnation of the economy.

He reports that further reductions in interest rates in April and September, 1971, have now fully released margins.

The year-end group balance-sheet shows a total due after May 31, 1971, at £13,624,400 (£10,380,991) less rentals unearned and £53,326 (£50,426) provision for doubtful debts, leaving £10,921,526 (£8,386,209), leaving £2,703,614 (£1,994,785).

Hamilton is a private company, the largest shareholder being Industrial and Commercial Finance Corporation. Its annual report is published in much greater detail than the majority of private companies, with the intention of providing maximum information in convenient form about the company and its operations, especially for the benefit of financial institutions who may provide finance for the business.

not less than £300,000, against £261,509 in 1970-71.

Consolidated earnings on Ordinary shares for the six months to September 30, 1971, were £142,000 against £118,000 in the corresponding period last year, equal to 3.5 per cent. (2.9 per cent.).

Group net assets, including investments at valuation were £3,376,000 (£2,122,185 to 1971) and net asset value per share 157p (128p).

Alpine Double Glazing sales record

Double glazing installations by Alpine Double Glazing (Sales) broke through the £1m. mark in the six months to July 31, 1971. At £1,004,000 they represent an increase of 30 per cent. on the corresponding period of 1970.

Alpine is a member of the Alpine-Exeter Group of Companies which plans a stock market "quote" next year. Samuel Montague and Co. was appointed in August to act as the group's merchant bankers.

Mr. J. Clisby, managing director of Alpine, reports that if growth is maintained at its present level the installation target of over £2m. will be "comfortably achieved" in the current year. For the year ended January 31, 1971, double glazing installations amounted to £1.6m.

With the Group's expansion in other home improvements, Alpine's contribution should take the current year's total sales well over £4m. (£2.5m.) Last year the group returned a pre-tax profit of £280,000.

Mr. Clisby said yesterday the company was now planning a major sales drive in the North of England to be followed by entry into Scotland.

Fore Street Investments property sale

Fore Street Investments is to sell three properties for a cash consideration of £450,000—hook value is £500,000.

The net rental income, less outgoings, from these properties in 1970 amounted to £40,000.

Proceeds will be applied in reduction of bank borrowings and to meet existing mortgage commitments.

Central Manufacturing to pay 7½% more

A FINAL dividend of 15 per cent. by The Central Manufacturing and Trading Group lifts the total dividend equivalent of 7½ to 25 per cent. for the year July 31, 1971.

Despite the generally difficult trading conditions, group pre-tax profit increased from £1,152,185 to a record £1,504,534 which is considered by the directors as being satisfactory. Turnover expanded from £10,831m. to £12,018m.

When reported last year profit up from £429,878 to £731,503, they said they felt confident that the year should be another successful one and that there would be an increased return arising in the long term from the capital expansion programme being undertaken.

External turnover 12,018,000
Trading profit 1,504,534
Interest charges 1,944,000
Provision for depreciation 1,504,534
Taxation 400,000
Group profit 1,604,534
Dividend 1,504,534
Available 1,004,534
Profit for 450,000

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WINDING-UP ORDER

Mr. Justice Frowman has granted a winding-up order against the following companies: Allen and Simmonds (Longhoughton), Clearstreet Properties, Unique Travel and Personnel, Catalytic Products (Leamington), and Carrol Investments.

Paul S. W. Builders, Chris Fima, Fleming-Eason, J. E. Frow and Co., Hericor Finance, Chubbans, Ray Dixon of Croydon (Transport), Expansion Road Stores, Elliott's Container Service and Brabazon Builders.

IMPROVED RESULTS ANTICIPATED IN 1971/72

The annual general meeting of Parker Timber Group Limited was held on October 15 in London. The following is the circulated statement of the Chairman and Managing Director, Mr. K. Chirby.

It is my pleasure to report upon the activities of your Company during the year ended 31st March, 1971. "Group Net Profit before Taxation amounted to £269,878, a reduction on the previous year of dividend maintained at 14½ per cent.

Trading conditions during the year have been very competitive and the level of wages and overheads is continually rising despite the Board's efforts to effect economies. Expenditure on new assets was £274,483 (1970 £294,892). The 1971 figure includes the acquisition of land and factory premises at Wislaw, near Glasgow. Depreciation for the year totalled £203,072, compared with the previous year's figure of £195,423.

All Timber Divisions have enjoyed a successful year's trading, and Limited are now contributing to Group Profits as anticipated in my statement last year.

APPOINTMENTS

Lucas executive post
for Mr. M. W. Kendall

Mr. W. Kendall, a member of the executive Board of JOSEPH & CO. LIMITED, has been appointed as vice-chairman-cum-director of Lucas. He will have group-wide policy duties, together with particular responsibilities for the co-ordination of the Lucas Group in Market and U.K. areas.

Mr. Kendall also became a chairman of Lucas and has been succeeded by Mr. G. R. Packard, parent company's Joseph (Industries).

Mr. W. R. Perrin has resigned his position as secretary of the Lucas Group subsidiary in France.

Mr. J. T. Davis, at present Lucas works manager, has been appointed as executive director in the Lucas Group.

Mr. E. J. Eloy has been appointed president-director of the Lucas Group subsidiary in the U.K. and France.

Mr. E. J. Eloy, a general manager and manager of the Lucas Group subsidiary in the U.K. and France, is retiring from the group on December 31 after 45 years' service.



Mr. M. W. Kendall

Mr. Derek Blackburn has been appointed deputy chairman of the Lucas Group subsidiary in the U.K. and France.

Mr. E. J. Eloy, a general manager and manager of the Lucas Group subsidiary in the U.K. and France, is retiring from the group on December 31 after 45 years' service.

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December 31 after 45 years' service. From January 1, Mr. W. R. Perrin becomes general manager for the U.K. and Mr. J. T. Davis becomes deputy general manager for the U.K.

Mr. Sidney Rosen, a director of Securities Agency, has joined the Board of LONDON AND OVERSEAS PROPERTY AND INVESTMENT COMPANY.

Mr. H. C. Burrows has been appointed as assistant director of ROBERT R. STOKES (MANCHESTER).

Mr. R. G. Brett has been appointed as assistant director of MACE RAINBOW AND STONE.

Following the success of the offer by the Land Securities Investment Trust to acquire the capital of the WESTMINSTER TRUST HOLDINGS, the Board of the latter concern has been reconstituted.

Mr. L. Freedman is chairman, and Mr. F. W. Maynard, Mr. C. H. Behrens, Mr. K. D. M. Chapple and Mr. W. Mathieson become directors.

Mr. Walter H. Solomon, the Earl of Dartmouth, Mr. A. C. Guthrie and Mr. C. G. Morley have resigned from the Board.

SPORT: TENNIS

Deceptive fast court
topples Embassy seeds

BY JOHN BARRETT

THE EMBASSY Championships at Wembley, the last of the great open events in Britain before the ITF ban falls on all contract professionals on January 1 got off to a spectacular start yesterday afternoon—but the sort of start that brought frowns rather than smiles to worried committee faces.

Within the space of two hours three of the men's seeds had disappeared, chopped down by less fancied opponents on the lightening fast carpet courts before they had had time to acclimatise to the excessive pace after the leisurely bounce of United and Continental clay.

Marty Riessen, the seventh seeded American professional, was the first to fall—a surprise since his conqueror was the wily, balding South African Bob Hewitt whose own expertise generally flourishes on slow courts.

Majestic

His winning margin was 9-6, 6-4 achieved through steeper nerves in the first set tie-break and two breaks of service against one in the second set.

Then the tall, majestic figure of U.S. Army private Stan Smith, the U.S. Open champion, Wimbledon finalist, winner of last year's Pepsi Masters Tournament, and second seed here, lost his way against the blazing returns of the Australian professional Ray Ruffels, who measured him 9-6, 6-4—an unhappy repetition of the previous upset.

Finally to the most surprising upset of the three, the defeat of the fourth seed Ken Rosewall 6-4, 6-2 by the South African two-handed doubles expert Frew McMillan.

Rosewall, so often a hero in this arena, where in professional events he has nine times been the final with five singles titles to his name, since his first appearance in 1957, fell at the first hurdle for the first time in a glorious career and never once touched the ball with any assurance.

This year he has taken to using an aluminium framed racket and, like Laver before him, he appears to have difficulties with his normally so consistent ground strokes.

In the first set he lost the vital fifth game on his service to fall 2-3 behind. This was perhaps hardly surprising since he had come from the clay of Barcelona without any practice but one felt that within a few games his touch would come.

In the eighth game he actually holed a break point on McMillan's service that would have given him four all and a

calmer outlook. But in a trice the point had come and gone and was 3-3 behind.

With the set under his belt McMillan's confidence grew visibly. Perhaps he can count himself fortunate to have been asked to qualify for the matches



Ken Rosewall

on Saturday and Sunday at least gave him the feeling for the bounce.

Rosewall's anguish was apparent at once at the beginning of the second set for he projected four consecutive double-faults to lose his service in the opening game—though the court was not responsible for this.

It was the total lack of touch and feel for the ball that produced such anguish.

Again in the seventh game two double-faults left him trailing 2-3 and it was no surprise

that McMillan won his own service to love for the match.

Afterwards Rosewall admitted that the pace was altogether too much for him. He agreed he had played reasonably well on the same surface last year but then he had arrived in time for practice.

There is bound to be some sort of inquest on the use of these carpets but, in truth, the only real problem is one of acclimatisation.

During the course of a season players are continually having to change surfaces—none of which is more difficult than that to the fast grass of Wimbledon in mid-June.

Then, however, any player aspiring to the later rounds of the championships takes care to play a grass court tournament beforehand or at the very least to arrive four or five days early to get the necessary practice.

In this context, with the international calendar becoming ever more crowded there is simply not time for such practice.

So for the future it would be wise for the sponsors and promoters of events placed close to one another in the calendar to agree on a uniform surface for all their events—be it fast or slow.

Mighty

The discomfort of the fancied players convinced me more than ever that Rod Laver the third seed's hands would be full against the mighty service blows of Roger Taylor when they met in their first round match later yesterday evening.

Mark Cox, Britain's only other singles representative following the defeat on Sunday of Gerald Battrick by the American Davis Cup player Tom Gorman has had his first-round match against Yugoslav Zeljko Franulovic postponed until to-day.

Lotus to power the
Jensen-Healey

BY MICHAEL CASSELL

THREE of the most famous names associated with high-performance motoring will be brought together next spring with the first appearance of the two-seater Jensen-Healey sports car powered by a Lotus engine.

An announcement yesterday brought to an end months of speculation concerning the choice of engine for the new vehicle. At one time it was thought a foreign power unit would be used and it is understood that plans for a link-up with BMW were thwarted because of capacity problems. The new model has been designed by the Jensen chairman, Mr. Donald Healey, and will be aimed at filling the market gap left by the disappearance of the Austin Healey 3000.

The car is to be called, quite simply, the Jensen-Healey, and production is scheduled to begin next April at Jensen's expanded Bromley factory. The vehicle will sell in this country for under £2,000 but is primarily seen as a model for overseas markets. When output eventually reaches 10,000 a year, over 80 per cent. will be marketed in the U.S.

Yesterday's announcement said Jensen and Lotus had signed a long-term contract for Lotus to supply a light alloy four-cylinder, two-litre engine for the model. The four-valve, twin-cam unit is die-cast and designed to develop

140 bhp with 150 lbs. ft. torque and a top speed in the region of 120 mph.

The result of three years' development work, including a long-distance racing programme, the engine will be fully machined, assembled and tested by Lotus in a new, partially controlled plant at its Norfolk factory.

Mr. Colin Chapman, chairman and chief executive of Group Lotus, also gave an indication of his own company's future model development when he commented on the latest agreement. "The two-litre engine represents an addition to the Lotus engine range and will be introduced in a new, full four-seater addition to the Lotus car range late in 1972. It will not replace the power unit in any of the current models manufactured by us."

"Great carrot"

An all-time record in British car sales, production and exports is forecast for 1971 by Mr. John Beswick, director of the Society of Motor Manufacturers and Traders. He predicted an even brighter future for Britain's car industry in the face of the challenge presented by Common Market entry.

"The promise of a 'home' market five times larger than the present U.K. market is a great carrot to hold before any manufacturer," says Mr. Beswick in an article in Canada-U.K. Trade News.

Japanese join Nigerians
in oil search

BY JOHN TRAFFORD

THE Nigerian Government has given approval for a joint venture between the country's State-owned National Oil Corporation and three Japanese oil companies to develop a new offshore concession area.

Tokai, Taihoku Oil and Mitsui Oil Development have been negotiating with Nigerian Oil to set up the venture since last month when they acquired concessions from the Nigerian Government for exploration in a 1,800-square kilometre offshore area. The three companies are transferring a 51 per cent. interest in their joint Japan Petroleum Company (Nigeria) to the Nigerian State concern. Prospecting is expected to start this year.

National Oil was set up last April to gain a share in the oil exploration and production activities carried out in the country. It has already acquired interests in the operations of Phillips Petroleum, AGIP and the French Saffrap company.

Two American oil companies,

Esso and Gulf, are being permitted to form joint ventures with Japanese interests in Okinawa, according to a Tokyo daily newspaper.

Esso plans to form a joint company with Sumitomo Chemical and General Sekiyu, while Gulf hopes to establish a company with Toho and Mitsubishi Chemical Industries.

Condition

Approval from the Japanese Ministry of International Trade and Industry was conditional on the new companies shipping not more than 20,000 to 30,000 barrels of oil to Japan. The oil was to be sold to Esso owning 50 per cent. of its joint venture with its partners having 25 per cent. each; Gulf and Toho are expected to own 45 per cent. each of the other companies with the 10 per cent. balance held by Mitsubishi Chemical.

Japan has not yet liberalised foreign investment in the oil industry.

Manchester Liners' pact
with Air Canada

BY OUR OWN CORRESPONDENT

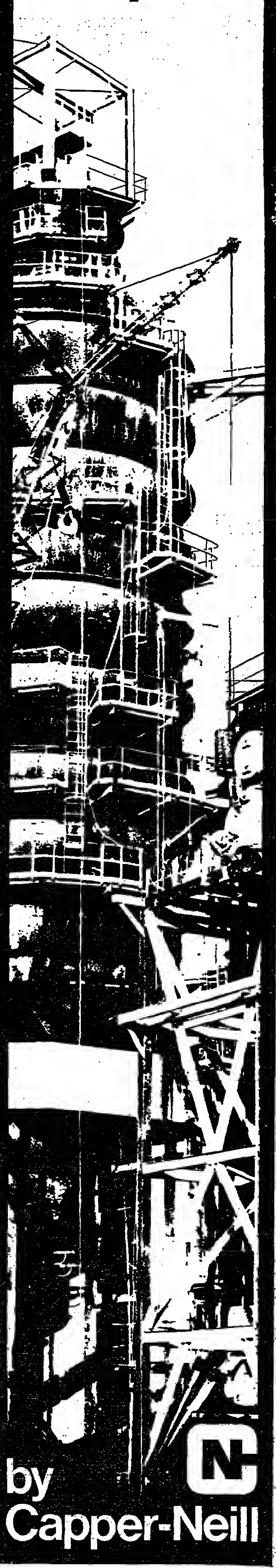
MANCHESTER, Oct. 25.

MANCHESTER LINERS—which has operated a specialised rapid freight service since 1969 by using a combination of sea and air—transit-to-day signed an inter-line agreement for promoting the service with Air Canada. It is claimed to be the first time an internationally-known container shipping line has joined forces with a major world airline in a service of this kind.

Mr. John Eden, Air Canada cargo sales and service director, said the air and shipping activities of the two groups were "not competitive but complementary." The bulk of cargo—at least 80 per cent.—on the Atlantic still crossed by sea.

Mr. Tony Roberts, managing director of Manchester Liners, stated that both companies recognised there was a new market to be developed. The air-sea combination offered an "in-between" service as between all-sea and all-air freightage and there was "fantastic scope" for its development.

Under the trade name "Flying Fish," Manchester Liners has been operating the service based in Manchester and Montreal. At both trans-shipment points it said the air and shipping activities of the two groups were "not competitive but complementary."

Process
plant

by
Capper-Neill

oland eases
German
border rules

WARSAW, Oct. 25.

AND East Germany agreed on an open border greater convertibility of currencies for citizens of the two countries. Government sources today. Probably from the coming of the New Year, they Poles and East Germans will be able to cross the border without passports or formalities.

Members of the two countries will be required only to produce their police identification to prove their nationality. At the same time, the sources the limit on the amount of convertible currency would be lifted.

At present Poles travel up to 7,000 zlotys (\$122) East German marks.

The agreement makes East many by far the most accessible foreign country for Poles visit. At present, travellers East Germany or any other European country must obtain a supplement to their sports which normally takes at three weeks to get. If successful, the plan could extend other East European countries.

The judge said the opponents would each pay £50 towards the cost of the appeal.

Judge upholds
cattle brand
patent claim

OPOSITION to the decision of a

superintendent examiner at the Patent Office that an application for a patent for freeze-branding of cattle could succeed, subject to suitable amendment, was dismissed by Mr. Justice Whitford, sitting as a Patent Appeal Tribunal, yesterday.

The opponents—the Hampshire Cattle Breeders' Society, British Oxygen, and the Milk Marketing Board—contended that any amendment should not be allowed because the application, by the Research Corporation of New York, Canada, after publication of a scientific paper dealing with skin pigmentation changes by freezing with carbon dioxide.

The judge said that although the paper had been published before the patent application it would become so widely known as to invalidate an application. In fact, the Milk Marketing Board ran a competition offering £500 for a new method of marking cows after the publication of the paper, and no award was made because no suitable method was submitted.

The judge said the opponents would each pay £50 towards the cost of the appeal.

Wimpey at risk
during £1m.
fire-judge

GEORGE WIMPEY and Co., the

contractors, had nearly finished a £880,000 extension to a Harlequin factory when fire caused £250,000 damage to it, a High Court judge said yesterday.

Mr. Justice Mocatta held that Wimpey, which was insured, was still at risk when the fire occurred on January 18, 1970.

He granted the factory owner, English Industrial Estates Corporation, of 1, Gateshead, the declaration it sought, that the risk of fire damage still lay with Wimpey at the time and had not passed back to the corporation.

The judge said the work carried out under the contract by Wimpey was "far advanced" in all sections when the fire occurred, but none was wholly finished.

The contract had called for the contractor to insure against fire for the full value until "practical completion" of the works.

NEW POST FOR
DAME ELIZABETH

Dame Elizabeth Arkroyd has accepted an invitation to become president of the Parents Association. She is director of the National Innovations Centre, and was formerly director of the Consumer Council.

Lyons Bakery
just saved a lot of dough

Lyons Bakery have put their old, fly office copying machines on the ad line. Out went floor-space-hogging copiers that needed trained staff to operate them—and in came Copycat desk-top electrostatics.

Lyons are now saving money on copy they make. With 48,000 copies a month going through, costs are dropped by an estimated £1,390 a year.

The new machines are unbelievably easy to operate. And gone

is the feeling that the office copier takes longer to warm up than the ovens... the Copycats are ready the moment they're switched on.

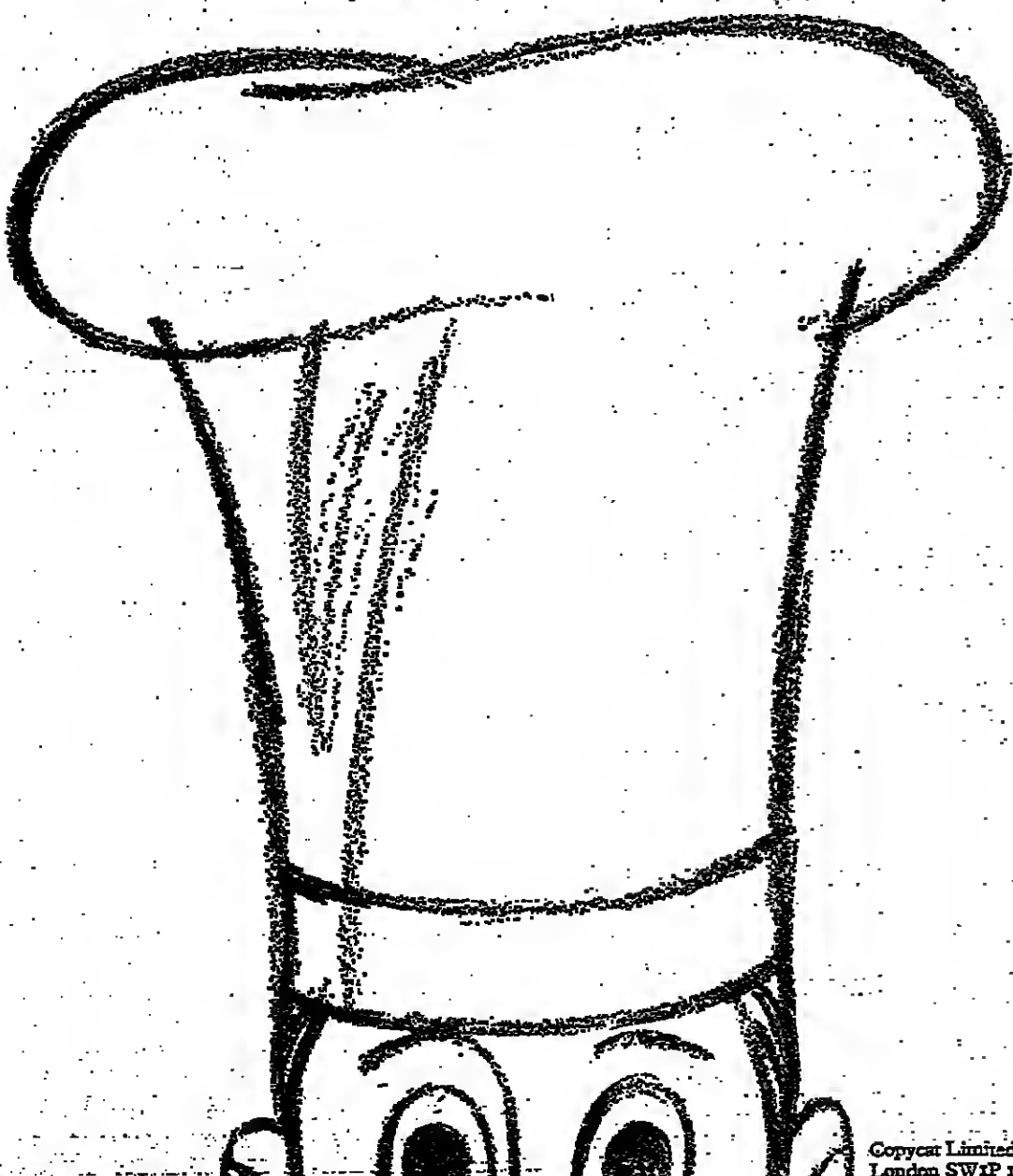
Other benefits they're enjoying at Lyons Bakery could also be to your liking whether you're making 48,000 copies per month or just 48.

Copycat have just produced a booklet called 'The real facts about Office Copying'. It tells you the snags and the benefits of all systems—then lets you make up your mind for yourself.

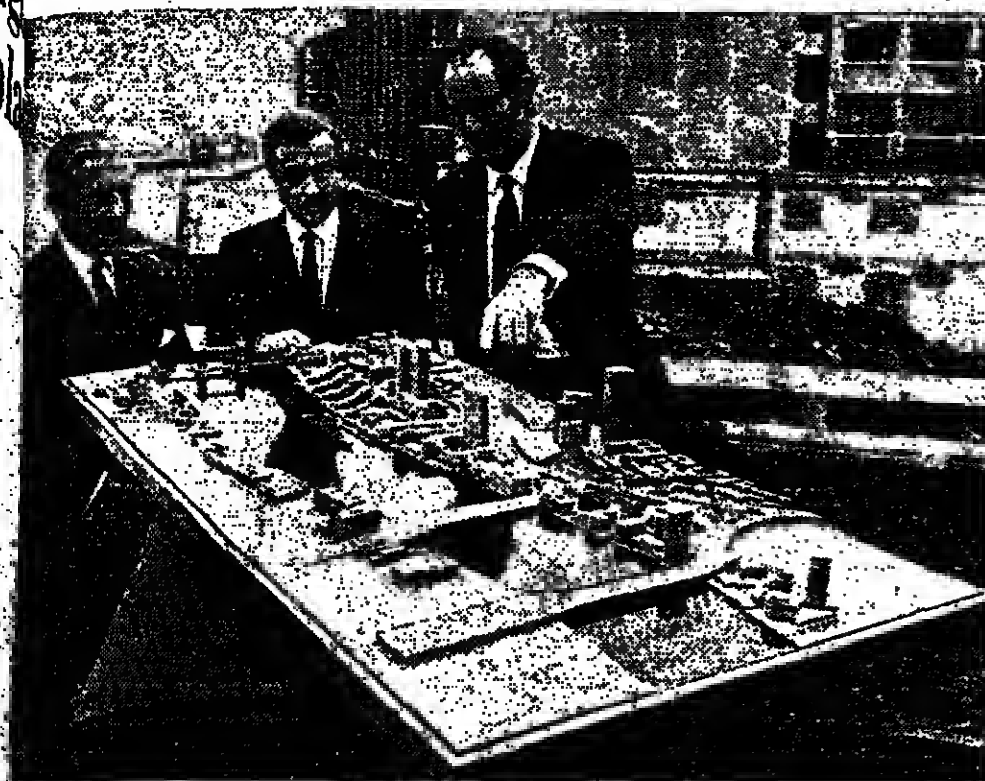
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Michael Rivkin, chairman of Renslade Investments (right), points out a feature on a model of the development scheme to Sir David Burnett, chairman of Hay's Wharf (left), and Mr. Gabriel Harrison, of Amalgamated Investment and Property (centre).

Hay's Wharf £300m. Sth. bank redevelopment plan

BY ARTHUR SMITH

AS TO redevelop a 32.5-acre site on the south bank of the River Thames at a cost of more than £300m, was announced yesterday by the Greater London Council. The plan, which would create 20,000 jobs, is the largest ever undertaken by the Council. It would involve the construction of a new bridge, the development of a new shopping centre, and the creation of a new residential area. The plan was approved by the Council's Planning Committee on October 22.

ree sectors

The plan would create 20,000 jobs, is the largest ever undertaken by the Council. It would involve the construction of a new bridge, the development of a new shopping centre, and the creation of a new residential area. The plan was approved by the Council's Planning Committee on October 22.

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TV advertising nets extra 14.2%

BY PAMELA JUDGE

TV advertising revenue rose by 14.2 per cent in the first nine months of the year compared with the same period last year, according to the Independent Television Companies Association. The increase was due to a combination of factors, including a rise in the number of advertising spots and a higher average rate per spot. The Association's figures show that the total advertising revenue for the first nine months of 1971 was £108m, compared with £94m in the same period last year.



Keep a sharp look-out for Renoir copies

The offer of free Impressionist reproductions which Landis & Gyr made recently in this newspaper proved to be so popular that it has been decided to double the print order to 2,000.

Even so, we shall have to disappoint a number of late applicants and we regret that the offer must now be considered closed.

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New day of terror in Ulster

BY JOHN GRAHAM

BELFAST, Oct. 25.

THE TERRORISTS in Northern Ireland to-day continued their tactics of ambush and specific assassination. Several people have been wounded, but at least by early evening none had died.

By six o'clock this evening there had been 15 incidents involving British troops. Some idea of the severity of the present situation can be drawn from the fact that simply because there had been no fatalities the authorities were prepared to consider it a relatively quiet day.

Ring at door

Early this morning Constable Sean Horbes, a Roman Catholic, was shot at the head by a terrorist firing from the opposite side of the street, when he looked out of his bedroom window after a ring on his doorbell. He is seriously ill.

A spokesman at police headquarters said: "We are treating this as another assassination attempt on a member of the force." A lunchtime there was what may have been an attempt on the Recorder of Belfast, Judge Topping. Four men entered his house in a fashionable suburb, but fled when they saw his housekeeper.

Two or three houses in this neighbourhood area have been burnt to the ground by arsonists over the last few months. There is a theory that they were mistakenly set on fire, and that the intended victim was Judge Topping.

A policy of specific assassination appears now to be part of the IRA strategy. Such incidents are frequent since an attack in central Belfast 10 days ago, when two plain-clothes policemen were machine-gunned to death in their car.

As for co-ordinated ambushes to-day, British soldiers in the Andersonstown area of Belfast came under gunfire just before dawn from "several locations". There were no casualties among the troops, but a woman was shot and seriously injured.

As the two women shot dead on Saturday, and about whom there is still a controversy raging, IRA death notices in this morning's newspaper suggest that the authorities' version may be correct. Considered a 475-foot tower, would provide accommodation for 6,500 to 7,000 staff.

See Men and Matters Page 16

"Seawing" holiday plans

BY JAMES McDONALD, SHIPPING CORRESPONDENT

NEXT YEAR the P & O and Horizon Holidays will more than double the size of their "Seawing" fly-stay-cruise programme.

The 1972 programme comprises 25 holidays of from eight to 17 days with a choice of five P & O liners—Cassandra, Oriana, Arcadia, Orsova and Chusan—and hotel accommodation selected by Horizon in the nine areas: Greece, Corsica, Ibiza, Sicily, Majorca, Spain, Portugal, Italy or the Canary Islands.

A typical 14-day holiday quoted by P & O in the programme involves leaving London's Heathrow on August 5 in a jet to Athens, staying six days in an hotel in Athens or by the sea, and joining the P & O liner Oriana for a cruise back to Southampton, with calls at Beirut, Gibraltar and Lisbon. Fares for this particular holiday range upwards from £133 in a four-berth tourist cabin to £245 in a single first-class cabin.

A total of over 1,000 holiday berths will be available in the programme, with prices starting at £88. Details are given in the 1972 Horizon Holidays brochure. P & O passenger division's U.K. manager, Mr. Peter Wise, comments: "With the travel market growing steadily towards two centre holidays, we are confident

New foreign partnership for Hambros

By Michael Standen

A FRESH international link between French and West German banks is being forged by a new partnership for Hambros Bank. As reported in the Financial Times on Saturday, Banque de l'Union Européenne is linking with West Germany's Westdeutsche Landesbank Girozentrale.

A major effect of the move is to bring in the French bank, with which Hambros has had an association for many years, as the third partner in the operation of Bankhaus Baurgardt and Brockelmann, the investment bank of Dortmund and Düsseldorf. At the end of the last year Hambros took a third interest in this business. Under the new agreement the Westdeutsche Landesbank will cede to the French bank a one-third interest in Baurgardt.

Furthermore Banque de l'Union Européenne will acquire 25 per cent of Franco Finanz Beteiligungs-Gesellschaft, a German holding company, which controls the Banque Franco-Allemande in Paris. The other 75 per cent of the capital of Franco Finanz Beteiligungs-Gesellschaft is held by the Westdeutsche Landesbank Girozentrale and the Deutsche Girozentrale.

In consideration for the shares of Bankhaus Baurgardt and Brockelmann Westdeutsche Landesbank Girozentrale will receive shares of Banque de l'Union Européenne, representing approximately 4.6 per cent of the capital of this bank.

Chrysler bid to protect used car buyers

Financial Times Reporter

CHRYSLER U.K. yesterday announced a "watchdog" scheme designed to improve the standard of used cars sold by its dealers. Under the plan dealers will have to satisfy the company that their facilities for preparing, presenting and servicing used cars are of a high standard decided by Chrysler. They will have to provide warranties for the vehicles sold, the terms to be decided on an individual basis and, in the event of a complaint which cannot be resolved, Chrysler will act as arbitrator.

Called the Chrysler Dependable Used Car Programme, the scheme will apply to any vehicle up to three years old with less than 30,000 miles recorded. It will be introduced by selected dealers first and 70 should be appointed by the end of this year. The majority of the 1,000 Chrysler U.K. dealers are expected to join in eventually.

Smokeless fuels 'satisfactory'

STOCKS OF solid smokeless fuel are satisfactory, Sir John Eden, Minister for Industry, said in a written reply.

"Producers and merchants are confident that, provided production continues normally, they can meet the demand this winter," he said.

Vehicle and General Tribunal of Inquiry

Whitehall foresight could have saved misery—QC

THOUSANDS of motorists holding policies with the collapsed Vehicle and General Insurance Company could have been largely saved from their "miserable predicament" by the appropriate degree of appreciation, foresight and fortitude on the part of the Government officials entrusted with their protection, claimed Sir Elwyn Jones, QC, yesterday.

Sir Elwyn was making his final speech on behalf of policy holders and shareholders of V & G to the Tribunal investigating the company's collapse. He strongly indicted the Insurance and Companies branch of the Department of Trade and Industry and its officers for failing to intervene in the affairs of the company as they were empowered under the statute. He referred both to the Insurance Companies Act, 1958, and the Companies Act, 1967, under which the branch's powers of intervention were expanded.

He submitted that Section 14 (1) of the 1958 Act was intended to and did, enable the branch to require that in any case where it was not already satisfied beyond reasonable doubt that a company's solvency margin was intact, then the company should use any one or more of the prescribed forms of assistance as specified by the branch.

He alleged that the officers of the branch in this earlier period of V & G's existence confused themselves in two ways, and the confusion to some extent overlapped. They became lost in a series of semantics.

One could collect a multiplicity of verbal formulations. It had been said that it was necessary "to be sure in advance that the inspection would produce evidence of insolvency." It had been said that "there must be some circumstances suggesting insolvency," that "there must be reasonable doubt as to whether a company is insolvent," that "there must be solid grounds for thinking that a company is in fact insolvent," and that reasonable grounds were needed "for suspecting that a company was or might already be insolvent."

He said that to the extent that he could not see how the branch's officers were or should have been seriously concerned about the possibility of underestimation for outstanding claims, then Section 14 (1), properly construed and applied, would have given them the means of removing or confirming that uncertainty, which was an uncertainty which must bear on the existence of a solvency margin itself.

Policy Sir Elwyn said that not a single memorandum from the DTT's solicitors could have given the Insurance branch comfort for the views it had advanced. He invited the Tribunal to conclude that the most by way of qualification which could be derived from any of the evidence submitted was that the power under that section should be exercised carefully and should not be exercised frivolously.

He said the Department was to be criticised in one of two ways: either the relevant officers failed to apply their minds to the matter at all; or they unjustifiably established for themselves a policy, a practice or a habit which put Section 14 outside the bounds of action.

He said that since their attention had been drawn from time to time to the differences of construction of Section 14 powers by the British Insurance Association the conclusion seemed inevitable that "we are in an area of practical reluctance, and not inattention."

He said it was also his submission that, as Under-Secretary, Mr. Christopher Jarman was primarily to blame after he had replaced Mr. Steyn in 1963 and that Mr. Cyril Homewood, the Assistant Secretary, who had been in the Insurance branch since January, 1961, must share that blame.

He said it was also his submission in respect of Mr. Jarman and Mr. Homewood that by excluding from their effective armoury the only statutory provision by which the truth could have become known, they were guilty of negligence.

He added: "A self-inflicted incapacity within a sphere where one's supervisory functions can only be discharged through the medium of their capability which is made sterile is, I submit, a clear form of negligence."

Sir Elwyn said the expectations which attended the passing of the Insurance Act to prevent insolvency were relevant. If, contrary to his submissions, the Tribunal concluded that the branch's officers might reasonably be in a state of doubt, because of the legal advice they had been offered, then they should have been prompted to clarify those doubts from other legal sources, with the object of acquiring the potency which, both the public and the BIA expected of them.

He said the branch appeared to have accepted there was a legal duty to see that a prescribed solvency margin should be maintained by insurers. It was also accepted by all its officers that this was a real exercise which concerned the actuality of the solvency margin and not simply a figure which was yielded by a few minutes' examination of the arithmetic.

Misconception He said it was a matter for consideration whether the branch officers, who represented the departmental misconception, arose from the balancing of assets and liabilities. All the way through the branch witnesses had said it was possible to be free of doubt with regard to the solvency after

some discounting of the assets, though the company's outstanding claims figure was left virtually as it stood in the accounts.

He said the constantly reiterated phrase was that the Department was concerned only about the degree and not the facts of solvency. It seemed the approach was that the reserves had always to be taken on trust as very largely they were and could not be respectably challenged in the course of the branch's computations.

Sir Elwyn claimed that negligence started with the fact that the branch never seemed to have considered an alternative approach. If that was the furthest they reached in their processes of thought it was not surprising their examination of individual assets was largely uncritical.

Failure to give serious consideration to the break-up basis for a valuation of the assets represented negligence all along the line.

Fundamental

He said it affected Mr. Jarman at the top, through Mr. Homewood down to Mr. Norman Nall, chief executive officer at the earlier period, and the equivalent officers at the later stage.

He said it affected them all because the company was both fundamental and elementary.

It was plain, he said, that the branch never sought advice from any quarter and never thought it was necessary to do so.

Sir Elwyn said the branch had always said comparisons were misleading because there were features of V & G's operation which made it distinguishable from any master company and distinguishable from the norm.

He said whenever one looked at a departmental minute dealing with this subject, one found acceptance of the discrepancy coupled with immediate reliance on some alleged feature of V & G's business which made the comparison unhelpful.

PROVINCIAL CUTS INTEREST RATES

Provincial Building Society is cutting the rate of interest on existing mortgages by 1 per cent, per annum to 8 per cent, from January 1. New offers will be at the lower rate from November 1.

Interest on investment accounts will be reduced by 1 per cent, per annum from January 1, except for the linked Paid Up Share/Save As You Earn scheme, in which interest on existing accounts will remain at 5 per cent, until 60 transfers to SAYE have been completed.

OBITUARY

Mr. W. M. Fenton, financial director of the Guthrie Corporation, died on Saturday.

The Hermit Crab is a great all-rounder

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F.T.—ACTUARIES SHARE INDICES

These indices are the joint compilation of The Financial Times, The Institute of Actuaries and the Faculty of Actuaries in Edinburgh

EQUITY GROUPS			Monday, Oct. 25, 1971					Fri. Oct. 22		Thurs. Oct. 21		Wed. Oct. 20		Tues. Oct. 19		Mon. Oct. 18		Year ago (approx)		High and Low Index				
GROUPS & SUB-SECTIONS			Index No.		Day's Change %		With 40% Corporation Tax		Div. yield %		Index No.		Index No.		Index No.		Index No.		1971		Since completion			
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TEAS—Continued

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THE LEX COLUMN

Ratings in the warrant market

With provisos around the very plausibility of a bid for Trust Houses Forte, with a whole spectrum of values depending on the terms, and finally, with the warrant market in despondency, the THF warrants are as difficult a security to evaluate as could be found. As far as the risks inherent in any bid terms are concerned, a cash bid (on the Hoechst/BUN lines) or a part loan stock offer still appear the most likely hazards; otherwise, there is at least comfort in the precedent of the Lombard Banking convertible, whose holders managed to take a 5 per cent. higher offer out of Matwest, on the grounds of the equity inherent in a long conversion period.

But the recent deterioration in ratings in the warrant market has cast some doubt on the upward potential supporting all went well for the THF warrant holders. The Hilt Samuel warrants provide an extreme illustration. Over the past six trading days, the HS warrants at £14½ last night have fallen 32 per cent. against a negligible fall in

the ordinary. The result is that a gearing ratio of well over four combines with conversion terms which would be just about as attractive as those of the THF warrants were THF ordinary standing at 180p (against 154p at present). It is fortunate, in fact, that the HS warrants look anomalously cheap.

Delta MEM

The Board of Midland Electric Manufacturing may not be disposed to welcome the bid from Delta Metal—equity/conversion in a 53:47 ratio worth 104½p against MEM's price of 94p, up 3p last night. It has a certain amount of ammunition, too, in Delta's cyclical record, its low growth markets and the recent sluggishness in orders for heavy semi-fabricated copper products—with buyers tending to hold off while the copper price was slipping.

On the other hand, MEM has exhibited a certain degree of cyclicity itself, and what growth it has been able to achieve in recent years seems adequately 3.4p to 5.1p fully diluted—

Central Mfg.

If anything, the 1970-71 results from Central Manufacturing and Trading are somewhat less encouraging than the April interim report implied. Profits may have risen from £1.1m. to £1.5m. before tax but virtually all of the increase is due to acquisitions; the acquisition growth was as expected, as was the rise in earnings from £1.1m. to £1.5p fully diluted—

hence, one supposes, the slight easing in the shares which closed 1p lower at 58½p last night.

That, then, could be the general view of CMT, leading to a two-grade p/e of 11.3. But it does not look like the right view, either on performance or prospects. Over the past seven years, CMT has traded its basic processing skills—traditionally in rubber and industrial products, but more recently in steel stockholding, drop forgings, light engineering etc.—into a compound earnings per share growth rate of over 20 per cent. Coming to last year, its performance was in fact impressive, considering that steel stockholding and metal processing (a near disaster area for some) accounted for nearly 40 per cent. of trading profits, with margins only 1.9 points lower at 6.7 per cent. Coming to the current year, CMT is unlikely to hold out great hopes for the first half, but it is banking on an uplift in

the second six months—when, inter alia, it should have the benefit of major capital investment on the steel scrap side beginning to show through. With other companies, this might sound like pie in the sky; with CMT, however, past performance must add credibility to its views on prospects.

See also Page 28

Pontin's

Sticking to its peculiar habit of reporting, effectively, a year in arrears—1970-71 figures reflect the 1970 season, and the 1971 season has now just ended—Pontin's is in line with the expectation at £22.8m. pre-tax profit on 11 per cent. The crucial point, of course, is what has happened since, and the word here is of a further profit increase for the 1971 season in spite of the problems caused by the postal strike in the middle of the booking season. And there is more volume growth in the pipeline: the new U.K. self-catering villages at Prestatyn and Hembsy were only open for

the latter part of the past season, and then not at full capacity, so 1972 U.K. capacity should be about a fifth greater than in 1970. On top of this comes the established Seacroft camp at Hembsy, which has just been bought, and developments at Pontentol where expansion is planned in Torremolinos, Sardinia and Majorca.

Of course, Pontin's has been threatening to become a growth stock for some time, without ever quite making the grade; at 29½p the shares are selling at 15 times 1970-71 earnings of 1.85p a share, fully diluted, and still require some assurance about margins and capital spending. In the past couple of seasons profits appear to have slipped behind the growth rate of turnover and capital employed. In contrast to Butlin's, however, the group has been skilful in isolating growth areas—self-catering camps in the U.K., Mediterranean villages overseas—and there could yet be a bunching of profits growth over the next two or three years.

See also Page 28

STEEL
PERSONAL STEEL SERVICE
FROM ALL GKN STEEL
STOCKHOLDING COMPANIES

Lombard Germany can only speak for itself

BY C. GORDON TETHER

THE Germans are, of course, entitled to express their views on the way in which the international monetary crisis should be handled. But they surely ought to give a lot more thought to the manner in which they are themselves behaving and to the wider issues involved before they start accusing other countries right and left of not playing the game in the floating rates business.

To begin with, one would assume from the vehemence with which Professor Schiller, their Minister for Economic Affairs, has been denouncing other countries for having resorted to exchange controls, official intervention in the currency markets and similar devices to prevent their currencies floating higher than they consider desirable, that Germany has been behaving in altogether irreproachable fashion in this respect. Yet in reality the Germans have been engaging in much the same practices.

Rules vacuum

After all, they have imposed restrictions on the interest that banks may pay on foreign funds as well as on certain forms of international financing activity—measures that are clearly disguised forms of exchange control. And recently they were reported to have taken an additional \$1,000m. into their external reserves with a view to preventing the appreciation of the D-mark when no agreement had been reached on the rules that should govern a new game, individual players are hardly justified in complaining if the others on the field do not feel called upon to abide by their ideas of what the rules should be.

Germany is so anxious, it would seem, to do everything she can to indulge the Americans that she sees no objection to falling in with the U.S. suggestion that market forces should be given the freest play to determine a new pattern of parity rates. Other people can, with every justification, feel very differently.

To start with, as everyone knows, exchange markets are at present glutted with dollars that flowed from the U.S. earlier in the year and are now trapped there by Nixon's August 15 measures.

Final arbiter

For another, to agree that even the present basic relationship between supply and demand for dollars was to be accepted as a final arbiter of the new world parities system would be to concede that the Americans had right to count upon their existing payments policies being indulged by the rest of the world for ever and ever. It would mean, in other words, that other countries had to tacitly consent to establish whatever exchange relationships were necessary to enable the U.S. to go on buying up their assets at a rate of upwards of \$5,000m. per annum. This may seem all right to the Germans. Alternatively, they may consider it vitally important to keep in with Washington for other reasons—connected, for example, with the fear that the U.S. may act on its threat to withdraw its troops from Europe if the plan to keep dollar imperialism on course is frustrated. In which case they may be ready to stomach all the distasteful features of present American policies without a murmur. But they can hardly expect countries with other ideas about the way in which to deal with U.S. bullying to be ready to adopt a similarly humble posture.

Disruptive

Finally, the German contention that countries which are ready to subscribe to their ideas of the manner in which the floating game should be conducted are playing "dirty" relies on ideological considerations of a highly controversial kind. Since nothing but good, they say, can come from allowing market forces maximum free play, any interference with them must automatically be harmful. One would have thought that if recent experiences teach us anything at all, it is that this is one of those good things of which one can have too much. We can all now clearly see that freedom for vast amounts of hot money to rush madly from country to country can be the most disruptive and this being so, the most sensible thing for hot money-peddlers of the free international capital market to do for the time being is to maintain a discreet silence, start

Horizon tells tour rivals to 'face the facts'

BY ARTHUR SANDLES

MR. VLADIMIR RAITZ, owner of Horizon Holidays, which has told Continental hoteliers in future it will not share accommodation with Clarksons, Thomson-Skylark, Cosmos, Blue Sky and Sunair/Lunn Poly, last night hit back at rivals who accused him of "arrogance".

He said that tour operators who suggested he was being arrogant "should learn to face the facts. Instead of hurling petulant abuse, they should take note of the new mood within and without the travel industry."

"Certain standard"

Mr. Raitz recently wrote to some 400 hoteliers warning them that in future Horizon would not send customers to hotels who cater for other named U.K. operators. This would allow

Horizon "to offer a certain standard of service for clients and the company."

There was an immediate response from other operators who suggested that Horizon did not want to offer the same hotels in future because it charged more to its customers than they did.

Mr. Raitz argues that this is not the case. "Hotels are fed up with the backwash of bad Press publicity which inevitably results. And, more than ever before, holidaymakers themselves have a right to expect from tour operators more than just lip service and colourful brochures."

He argued that other companies indulged in exclusivity policies and he was taking a basic hotel-negotiating principle to its logical conclusion.

"After-sales arbitration schemes are all very well. But we are concerned with prevention rather than cure. It is an obvious crack at market leader Clarksons which is campaigning for an industry-wide arbitration system."

The argument should be seen against a background of debate over tour-operating margins. Such companies as Clarksons, Thomson, Sunair and Cosmos are involved in a fierce price war.

Mr. Raitz said: "Tour operators who continue to expound the maxim that paying a hotelier a little more is not the way to improve standards, are completely out of touch. The feelings of the vast majority of people today, especially hoteliers, prove that marginal costings are beginning to endanger standards."

Many years

BY HAROLD COLTER, INDUSTRIAL CORRESPONDENT

HOME ORDERS for British-built machine tools fell to their lowest level for many years in July, according to provisional figures released yesterday.

Net new orders from the home market were worth only £3.7m. during the month, compared with £6.2m. in June and figures as high as £11m. at this time last year.

If the industry's order book continued on the path suggested by its figures released so far, it would sell only £7m. worth of machine tools in Britain this year, some £40m. less than in annual rate of about £72m., well since 1967.

1970 and over £60m. less than down on last year's final figure of \$86.7m. Fortunately, there is often an improvement in order during the late summer and early autumn.

Deliveries of machine tools to the U.K. market were running at £7.2m. in July, and those to overseas buyers at £6.2m. The total delivery figure for July rose to £13.5m. a very low level.

With a total of £117.8m. of orders outstanding at the end of July, the machine tool industry's order book was thinner than at any comparable time of the year since 1967.

Malta claims Mintoff set for new round of London talks

BY OUR OWN CORRESPONDENT

VALLETTA, Oct. 25.

MR. DOM Mintoff, the Maltese Prime Minister, will fly to London next week for another round of high level talks on future defence arrangements on the island, according to Press reports here.

It is believed that he intends to start tackling the financial aspects of a possible agreement with Britain while top civil servants discuss the military arrangements. The Maltese Prime Minister, Sig. Aldo Moro, arrived on a short official visit in two weeks time.

The Italians have left here "fully cognizant" of the reasons behind Mr. Mintoff's moves and relations are now regarded as very strong between the two countries. Mr. Mintoff is also expected to visit Germany for more talks with the Chancellor, Herr Willy Brandt, and the possibility of a meeting with the French President, M. Pompidou, was not discounted by official sources this morning.

The news that Mr. Mintoff will Major Abdullah Jalloud, flew to exchange ambassadors.

he going to Britain was announced by the General Workers Union morning newspaper to-day, while newspapers here continue to speculate on how friendly Dom Mintoff and President Khedafi really are now.

Announced by the Maltese Premier, Mr. Dom Mintoff, and President Khedafi really are now.

Publicly, Government circles have given no suggestion that Major Jalloud may be here to bridge a possible gap between the two leaders. In fact, official sources to-day denied there are any differences.

Khedafi, however, could have been annoyed by the Communist build-up of aid to Malta. To the Poles and the Romanians have held meetings with Mr. Mintoff to discuss "projects" which could be of help to Malta.

The Poles discussed the "pacification of the Mediterranean Sea" (a subject President Khedafi claims is his monopoly), and the two countries are to exchange ambassadors.

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Britten-Norman carries on production

By Michael Donne

BRITTEN-NORMAN, the Isle of Wight aircraft manufacturer, is continuing business while the Receiver, Mr. Maurice Eckman, of Price Waterhouse, continues his investigation into the company's affairs.

This became clear yesterday, the first full day of business after the announcement on Friday afternoon that the joint managing directors, Mr. Desmond Norman and Mr. John Britten, had called for a receiver following a decision by Exporters' Refinance Corporation to recall loans of up to £2.8m.

Mr. Eckman, who began his task over the week-end, is now seeking to establish the basic facts of the company's business, prior to seeking ways and means of keeping the company alive. It is hoped that he may make a statement within the next few days.

Mr. Norman is to visit the factory at Bembridge again to-day. In the meantime, a spokesman for the workers' side of the company's productivity council said that while they had no information about the future "at least we have had an unofficial assurance, which satisfies us, that we shall get our wages at the end of the week, whatever the future holds."

V and G: Department criticised by Counsel

By John Hunt

SOME OF the officials of the Department of Trade and Industry were negligent in their handling of the Vehicle and General Insurance Company, Sir Elwyn Jones, Q.C., representing shareholders and policyholders, told the V and G Tribunal yesterday.

He alleged that thousands of motorists holding policies with the company could have been largely saved from their "misadventure" by the appropriate degree of appreciation, foresight and fortitude on the part of the Government officials entrusted with their protection.

Sea of semantics

Officers of the Insurance and Companies Branch of the DTI became lost in a sea of semantics, he alleged. In his submission, Section 14 (1) of the 1958 Insurance Companies Act enabled the branch, if unsatisfied with a company's solvency margin, to require the company to give any form of assistance prescribed by the branch.

He told the tribunal the conclusion seemed inevitable that "we are in an area of practical reluctance and not inattention."

In that case, he continued, as Under-Secretary Mr. Christopher Jarlode was primarily to blame after he had replaced Mr. Stacy in 1964, and Mr. Cyril Homewood, the Assistant Secretary, must share that blame.

Sir Elwyn submitted in respect of Mr. Jarlode and Mr. Homewood that, by excluding from their effective armoury the only statutory provision by which the truth could have become known, they were guilty of negligence.

Failure to give serious consideration to the break-up basis for a valuation of the assets of V and G represented negligence all along the line, he declared.

Sir Elwyn alleged that it affected Mr. Jarlode at the top, Mr. Norman, chief executive officer at the earlier period, and the equivalent officers at the latter stage.

Report, Page 31

Air France in airbus riddle

BY ROBERT MAUTHNER

PARIS, Oct. 25.

DOUBTS about the future of the ately exaggerating Air France's Franco-German-Dutch Airbus, "Indecision" which could have been raised by merely reflecting a prudent negotiating position on the price of the aircraft. On the Government's side, at any rate, there have been no indications that the required national airline, Air France, is said to be hesitating about buying the aircraft.

Although Air France has been categorically denied newspaper reports that the planned expansion of its 20-strong fleet of Boeing 727-200s implies that it will not buy the Airbus, it is clear that the final decision to place orders has not yet been taken.

Financial talks

The Air France Board is due to meet within the next few days to discuss the whole question, after the conclusion of negotiations on financial terms between the company and Aerospatiale, the French partner in the consortium which is

commenced by the metalurgical and transport branch of the Communist-led CGT, France's most powerful trade union, which says that the choice between the Airbus and the Boeing 727-200 was the subject of "the greatest indecision" on the part of Air France.

The CGT appeals to the Government to provide Air France with sufficient funds to safeguard the future of the French aircraft industry.

Price position

It is quite on the cards, of course, that the CGT, whose declarations are almost always politically motivated, is deliber-

Cunard sells Baxter Hoare holding back

By James McDonald

CLARKE Steamship Company, sold back by mutual agreement to the original holders, Mr. A. D. Saphir and his family, the 75 per cent. holding in Baxter, Hoare and Company it acquired in March, 1970.

Mr. Saphir is chairman of Baxter, Hoare and Company, international shipping, forwarding and air freight agents, and he and his family already hold the remaining 25 per cent. of the company.

Baxter Hoare was acquired by the previous Cunard management before Trafalgar House obtained control of Cunard earlier this year. The purchase price of the 75 per cent. interest was believed to be in the region of £100,000 and it is understood that the Saphir family has repurchased control for about this figure.

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Weather

U.K. TO-DAY

It will be cloudy but dry in W. Scotland and N. Ireland. The rest of Scotland, N. Wales and N. Wales will be dry with sunny spells, but fog and frost will occur at times. S. Wales and S.W. England will be mostly cloudy, but intervals of sun are expected later. In the Channel, the weather will be rather warm generally.

London: E. Anglia, S.E. and S. Wales. Dry, sunny spells. Local fog and night. Wind E. Max 15C (59F).

Channel Is., S.W. Eng. S. Wales. Mostly cloudy, local clear intervals later. Wind Max 15C (59F).

W. Midlands, N. Wales, and Cent. N. England, L. of Man, S.W. Scotland. Dry, sunny spells. Local fog and night. Max 14C.

N.E. England, Borders, E. Scotland, Cent. High. Edinburgh, Glasgow, Dundee. Dry, sunny spells. Local fog and night. Max 13C.

Argyll, N.W. Scotland, N. Ireland. Mostly cloudy, mainly wind S. to S.E. moderate. 13C (55F).

Cathness, Orkney, Shetland. Dry, sunny spells. Wind moderate. Max 11C (52F).

Outlook: Little change. Ingoing: London 13.16, C. 18.22, Belfast 18.31.

BUSINESS CENTRES

	Yday	Mid-day	Close
Amsterdam	100.00	100.00	100.00
Bombay	100.00	100.00	100.00
Buenos Aires	100.00	100.00	100.00
Calcutta	100.00	100.00	100.00
Canton	100.00	100.00	100.00
Cebu	100.00	100.00	100.00
Hankow	100.00	100.00	100.00
Harbin	100.00	100.00	100.00
Hong Kong	100.00	100.00	100.00
Kobe	100.00	100.00	100.00
London	100.00	100.00	100.00
Lyons	100.00	100.00	100.00
Manila	100.00	100.00	100.00
Medan	100.00	100.00	100.00
Shanghai	100.00	100.00	100.00
Singapore	100.00	100.00	100.00
Sourabaya	100.00	100.00	100.00
Tientsin	100.00	100.00	100.00
Yokohama	100.00	100.00	100.00

HOLIDAY RESORTS

	Yday	Mid-day	Close
Alaska	100.00	100.00	100.00
Algeria	100.00	100.00	100.00
Argentina	100.00	100.00	100.00
Australia	100.00	100.00	100.00
Bahamas	100.00	100.00	100.00
Bangladesh	100.00	100.00	100.00
Barbados	100.00	100.00	100.00
Belize	100.00	100.00	100.00
Bermuda	100.00	100.00	100.00
Bhutan	100.00	100.00	100.00
Bolivia	100.00	100.00	100.00
Brazil	100.00	100.00	100.00
Brunei	100.00	100.00	100.00
Burma	100.00	100.00	100.00
Cameroon	100.00	100.00	100.00
Canada	100.00	100.00	100.00
Cape Verde	100.00	100.00	100.00
Cayman	100.00	100.00	100.00
Czechoslovakia	100.00	100.00	100.00
Dominican	100.00	100.00	100.00
Dominica	100.00	100.00	100.00
Ecuador	100.00	100.00	100.00
El Salvador	100.00	100.00	100.00
Equatorial Guinea	100.00	100.00	100.00
Ethiopia	100.00	100.00	100.00
Fiji	100.00	100.00	100.00
France	100.00	100.00	100.00
Ghana	100.00	100.00	100.00
Guatemala	100.00	100.00	100.00
Haiti	100.00	100.00	100.00
Honduras	100.00	100.00	100.00
Hungary	100.00	100.00	100.00
India	100.00	100.00	100.00
Indonesia	100.00	100.00	100.00
Italy	100.00	100.00	100.00
Jamaica	100.00	100.00	100.00
Japan	100.00	100.00	100.00
Jordan	100.00	100.00	100.00
Kazakhstan	100.00	100.00	100.00
Kenya	100.00	100.00	100.00
Korea	100.00	100.00	100.00
Kuwait	100.00	100.00	100.00
Laos	100.00	100.00	100.00
Lebanon	100.00	100.00	100.00
Libya	100.00	100.00	100.00
Lithuania	100.00	100.00	10